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ABSTRACT

This monograph contains 11 papers describing model projects that address the identification of gifted students. An introduction by Carolyn M. Callahan and Carol A. Tomlinson identifies commonalities and themes in the promising practices highlighted in the papers. The papers include: (1) "Project STREAM: Support, Training and Resources for Educating Able Minorities" (Donna Rae Clasen); (2) "Early Assessment for Exceptional Potential in Young Minority and/or Economically Disadvantaged Students" (Beverly D. Shaklee and others); (3) "A Model Program for Identifying Young Underserved Gifted Students" (Waveline T. Starnes); (4) "The Full Potential Program for Underserved African American Students" (Nancy Amuleru-Marshall and others); (5) "Spotting Talent Early in Minority Students: Project STEMS in Howard County, Maryland" (Paula M. Pizzat); (6) "Urban Scholars: Access to Excellence for Students and Schools" (Joan Becker); (7) "The Search for Talent: New Methods for Assessing Student Strengths" (Evelyn Levsky Hiatt); (8) "Talent beyond Words: Identifying and Developing Potential through Music and Dance in Economically Disadvantaged, Bilingual and Handicapped Children" (Barry Oreck and Susan Baum); (9) "The Twice-Exceptional Project: Identifying and Serving Gifted/Handicapped Learners" (M. Elizabeth Nielsen and others); (10) "The Menasha Joint School District Gifted Program: Matching Identification and Curriculum" (Scott L. Hunsaker); and (11) "Coordinating Instruments with Identification in Bayonne, New Jersey" (Paula M. Pizzat). A final chart summarizes the programs. Individual papers contain references. (DB)

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CONTEXTS FOR PROMISE: NOTEWORTHY PRACTICES AND INNOVATIONS IN THE IDENTIFICATION OF GIFTED STUDENTS

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Carolyn M. Callahan
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THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED

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Carolyn M. Callahan
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CONTEXTS FOR PROMISE: NOTEWORTHY PRACTICES AND INNOVATIONS IN THE IDENTIFICATION OF GIFTED STUDENTS

School district personnel are constantly challenged to improve practice across all programs and services. One area in which the field of gifted education faces particular challenge is in the area of screening, identification and placement of gifted students. First, the variety of definitions of giftedness offered to the practitioner present a dilemma as each definition represents a different philosophy and orientation, with little consensus in the field about the most appropriate orientation. Even when a definition is selected, the vagueness inherent in many definitions makes translation of definition into practice very difficult. Further, issues of equity, the charge of bias in standardized tests, and the lack of research on the validity of commonly used assessment tools contribute to making the process of identification even more difficult. Finally, the process of screening and identification are too often seen as ends in themselves, a way of giving a label to deserving students. A more legitimate orientation is to view the process of identification as one of identifying educational needs rather than one of identifying students.

In order for school districts to maximize their effectiveness in the screening and identification of gifted students, it is imperative that the field fully understand current theories of intelligence and the ways in which new conceptions of giftedness affect the process of identifying human potential. Borland (1989) stresses the need to identify all talents and abilities in the face of an ever-changing cultural climate. Achievement of this goal requires the identification of measures suitable for identifying potential and performance across a wide variety of disciplines and among traditionally underserved populations.

At the University of Virginia, the National Research Center on the Gifted and Talented has been examining the options available to school districts faced with the dilemmas of identification. One of the projects has involved the collection and evaluation of instruments and procedures used in identification of the gifted. As this examination process unfolded, it was obvious that some districts had been able to face the problems presented and develop measures and systems which were exemplary models of the practices advocated in the literature.

At the same time, many of the model projects funded by the Jacob K. Javits Gifted and Talented Students Education Act, were also addressing the same issues through a variety of innovative practices. In looking at the progress of these projects and our collection, we determined that it was important to bring these projects to light and share the experiences and expertise that had evolved through the efforts of these practitioners.

SITE SELECTION

Obviously, the first criterion that was applied to the selection of programs to be highlighted in this monograph was that the practices used were models of the principles that have been advocated in the literature of gifted education. Hence we initially screened for possible programs where there was a clear concordance between definitions of giftedness and the instruments and practices used, use of multiple instruments to collect data on students, use of instruments which have at least preliminary indications of reliability and validity, and connections between the identification process and services to be delivered. Little purpose is served by identification procedures if the fundamental connections to educational opportunities are not addressed.

Because the second primary goal of collecting these promising practices was to address the issue of equity in the identification process, the commitment of the school districts involved to serve disadvantaged, culturally diverse or other under-represented population was the other primary gauge against which we judged the programs. Each of the school districts which we have included in this monograph has attempted to address issues relating to the identification of students from minority populations, socio-economically disadvantaged, limited English-speaking, handicapped or very young gifted students. As the subsequent chapters illustrate, we have tried to find promising practices in each of those categories.

Finally, we were most interested in schools which were using innovative practices that could lead other schools in new directions for addressing the problems of equity in gifted programs. When selecting representative programs, we attempted to include a variety of new ideas and approaches ranging from the use of traditional tests and assessments in new ways to use of alternative assessments such as portfolios and observation, from new conceptions of ways to approach traditional definitions of intelligence and giftedness to new approaches using alternative conceptions of intelligence and giftedness, and from traditional test-based identification to developmental approaches to identification. The cases which are highlighted in this monograph also include exemplars which represent the arts as well as the traditional academic disciplines.

COMMONALITIES AND THEMES IN PROMISING PRACTICES

Our review of the new practices which are emerging in the field of identification and the particular chapters included in this monograph suggest that some clear directions are emerging which merit attention from those who are in a position to influence decisions about the identification procedures in local schools.

Acceptance of intelligence as multi-faceted

Many of the innovations included in this monograph exemplify a trend toward viewing intelligence as manifesting itself along multiple dimensions rather than one or two dimensions. This is illustrated by the adoption of Gardner's (1983) model of multiple intelligences in several of the chapters.

Recognition of the multiple manifestations of giftedness

In the systems which have been most successful in identifying students from minority cultures, there has been an acceptance of the premise that intelligence expresses itself differently in different contexts and cultures. This has resulted in decisions to seek evidence of intelligence in culture-specific and context-specific ways rather than relying on more traditional measures such as achievement or aptitude tests which seek to generalize narrow evidence to all settings and groups. In many cases this resulted in the development of identification tools appropriate to specific populations in specific contexts and the matching of procedures to the child rather than force-fitting the child to the identification procedures.

Emphasis on authentic assessment tools and assessment over time

In conjunction with accepting the prior premise, we found much greater emphasis on data collection via interaction with students and observations of students in action rather than a reliance on paper and pencil responses. These assessments also focused on looking at a student's development over a period of time rather than relying on the outcomes of performance on one day in one particular setting. New practices were often accompanied by a tendency to look at "how" students respond to instructional intervention rather than looking only at an end product.

Expanding sources of evidence

Another natural consequence of acceptance of the premise that intelligence will manifest itself in different ways in different contexts is an expansion of the concept of reliable sources of information and consequent attempts to collect a wide variety of information on children from a wide variety of both school and non-school sources.

Development of a philosophy of inclusiveness rather than exclusiveness

Each of the programs which emerged from our review as innovative and successful at achieving its goals was characterized by an underlying philosophy of inclusiveness. They stress the existence of giftedness in all cultures and economic groups, seek students who are gifted non-conformers as well as performers, and focus on strength-finding and strength-building in students rather than deficit-finding and remediation in order to foster undiscovered ability. Much emphasis is placed on potential in lieu of strict reliance on demonstrated performance.

Strong links between the identification process and instruction

The identification procedures which are described in this monograph are characterized by a careful and planned linkage between identification and service to students and by a recognition of the link between these components of a gifted program and the need for on-going and intensive staff training for the process to work. The procedures which are described are carefully linked to an underlying assumption that data collected on children should be used for instructional decision-making, not labeling. This belief in the collection of educationally relevant data allows a broader conception of assessment, a broader concern with addressing educational needs of all children, and the collections of data on all children to enhance their educational programs.

Collaborative efforts

The programs described in this monograph also represent excellent examples of collaborative efforts of many kinds. Not only are there university/school district collaborative efforts; the programs also involve administrators of gifted programs working with special education staff, regular classroom teachers, specialist teachers, early childhood experts, and staff from many related areas -- using different areas of expertise, building support and understanding and broadening the base for services.

Use of identification to enhance understanding

The evolution and implementation of the innovative strategies discussed in the chapters which follow are also models of attempts to use the identification process and the accompanying procedures to inform school staff about the presence and needs of gifted learners. They are based on the premise that it is important to change staff attitudes before changes in practice can occur.

Early and on-going plans and procedures to evaluate the process

One of the most notable characteristics of these programs was a commitment to assess the success of the identification procedures in identifying gifted students and the services offered to the students identified by the new process. Each of the selected programs had systematically evaluated its process in light of the reliability and validity of the strategies which were being implemented.

Relationships with the General Educational Reform Movement

Each of the models in this document reflects leadership in making the options available to gifted students consonant with the evolving reform movement. For example, we see examples of performance assessments, portfolio development, and a clear emphasis on the importance of the development of talent among minority students. In addition, the emphasis on assessment becomes one of assessment as teaching and teaching as assessment. The integration of these processes allows for flexibility in the instruction of all children, including the gifted. It also suggests a reorientation which allows for the emergence and nurturance of talents as children encounter new experiences in their school careers.

A CAUTION

Each of the identification models described in this monograph evolved from specific needs, from a particular philosophy and in a particular context. It is dangerous to assume that any model can be implemented in a wholesale fashion in another setting without first closely examining a match between the premises of the model and the circumstances of the new setting and establishing the readiness of the new context for change. The models are not presented as panaceas; they are presented as guides, as catalysts to stimulate others, and as provocations to others who need to change.

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Project STREAM

Support, Training and Resources for Educating Able Minorities

Donna Rae Clasen

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Abstract

Project STREAM, a collaborative effort involving three Wisconsin universities and six school districts, focuses on improving identification and programming for highly able minority students. Giftedness is perceived as multidimensional; thus, identification is dependent on multiple data sources including both traditional and non-traditional assessments. Three non-traditional approaches used in STREAM show promise as effective identification tools: an art task, contextual problem solving, and Opportunities for Revealing Concealed Abilities (ORCA). Academic and non-academic data are used to develop student profiles which become the basis for programming recommendations. Eight factors critical to the success of the program have been identified and are enumerated.

Project STREAM is a collaborative effort between three Wisconsin universities and six school districts which include rural, mid-size, and large urban schools. The program is funded by a Jacob Javits Grant with additional support from the University of Wisconsin-Extension and the Wisconsin Department of Public Instruction. The primary purpose of STREAM is to improve identification and programming for gifted and talented students with a major focus on African-American, Hispanic, Native American, and Southeast Asian students.

The need to attend to the skills, talents, and abilities of students of diverse ethnic backgrounds is well documented (Bernal, 1980; McLeod & Cropley, 1989; Passow, 1991). Currently African-Americans, Hispanics, Native Americans, and many Southeast Asian students are under-represented in almost all groups which signal prestige and advancement. At the school level, for example, minority students are frequently under-represented in gifted and talented programs and over-represented in remedial programs (Richert, 1987). Minority dropout rates reach as high as 72% (Our Schools, 1991) in some schools; and statistics from universities and colleges reveal serious discrepancies between minority and non-minority matriculation numbers and even more serious gaps in graduation rates. This despite the fact that approximately 27% of the nation's students currently are from groups traditionally identified as minorities.

At least five barriers prevent many minority students from developing their talents and abilities. (1) Socio-economic inequality. Students from economically-limited environments often lack social and educational opportunities which engage and promote abilities and talents. For these young people, potential too often remains just that. (2) Educational history. Many minority students currently in school will be the first-generation of their family with a post-secondary degree. Family role models and support systems for education are missing. (3) Education as a cultural issue. Because academic achievement has historically been viewed as a prerogative of the majority group, some students receive peer pressure not to achieve, that is, not to sell out to "whitey" (Fordham & Ogbu, 1986). (4) Expectations. In too many instances, teacher expectations for minority students are low, and expectations are often self-fulfilling prophecies (Strom, 1990). (5) Conceptualization of giftedness. Minority students are frequently omitted from gifted programs because inclusion rests primarily on academic ability and achievement determined by instruments which may not be culture fair or culture free. In this case, three issues are involved: the need for a reconceptualization of giftedness, multiple sources of assessment, and culture-fair identification. Project STREAM addresses these five barriers to equity.

The program is guided by five principal goals: (1) to promote a conceptualization of giftedness which embraces the idea of multiple intelligences; (2) to develop multiple ways to identify the diverse talents and abilities of minority students; (3) to increase the representation of minorities in gifted programs to the level proportionate to their representation in the population; (4) to promote systematic and continuous programming for students in the program during middle and senior high school; and (5) to increase the likelihood that students will stay in school through high school and subsequently elect to start and complete a baccalaureate degree.

To promote achievement of STREAM goals, representatives of participating schools have identified seven program objectives:

1. To advance three assumptions among educators and parents.
    a. Talents and abilities are distributed equally without regard to gender, race, or nationality.

   b. Multiple talents exist and can be identified.
   c. Program offerings must be driven by the needs of students.

2. To develop and use multiple forms of identification.
3. To promote systematic and continuous program options for identified students.
4. To develop a college orientation with students at an early age.
5. To provide teachers and administrators with staff development opportunities.
6. To provide workshops and support networks for parents and family members.
7. To increase the representation of minority students in existing or newly developed gifted and talented programs within schools.

Each of the objectives will be addressed here with emphasis on identification. While STREAM focuses on under-represented students, the program philosophy and implementation have significance for gifted programming in general.

CONTEXT OF THE PROGRAM

In STREAM, three universities collaborate with six school districts enrolling large minority populations. Primary personnel include university program directors, an outreach specialist in the largest city, school liaisons (learning coordinator, multilingual director, etc.) and volunteers. The majority of students currently in the program (n=264) are in middle schools which range in size from 529 to 1093. The percentage of minorities in STREAM schools ranges from 12 to 74 percent. African Americans comprise the largest percentage (60-74% in some schools) followed by Hispanics (12-15%). Asians, Native Americans, and students of mixed ethnicity comprise 1-6% in the various schools.

IDENTIFICATION: TALENT IDENTIFICATION MATRIX (TIM)

In STREAM, giftedness is defined as potential or demonstrated ability for superior performance in the following areas: intellectual, general academic, specific academic, creative, visual or performing arts, interpersonal skills, such as leadership, and adaptation (e.g., problem solving; decision making; coping). Personal life factors and motivation are also considerations. The definition reflects the work of Marland (1972), Taylor (1973), Gardner (1983), and Renzulli (1986).

To address the goal of identifying multiple talents, a Talent Identification Matrix (TIM) has been developed (see Figure 1). Similar to the Baldwin (1984) and Frasier (1990) identification schemes, the matrix identifies abilities and talents on one axis and assessments on the other. Assessments are consistent with the definition and are both traditional (e.g., grades, achievement scores, teacher recommendation) and nontraditional (e.g., art assessment, problem solving, community recommendation). Cells may contain scores from assessments but emphasis is on comments regarding performance. Four levels of ability are designated: Below Basic, Basic, Proficient, Advanced. Detailed information on cells may be found in the student's portfolio.

TIM promotes inclusion, not exclusion. Students falling in the top 5 percent on any assessment are identified as Advanced on that assessment and qualify for initial screening. Both weaknesses and strengths are noted on the matrix since program orientation is to help students qualify for existing high ability programs as well as to find talents. Thus, both areas receive programming attention when weaknesses are in academic areas. For example, to best meet the needs of an outstanding artist who is performing at a basic or below basic level in academic subjects, help must be offered in the academic areas as well as in areas of advanced performance.

Figure 1

Talent Identification Matrix (TIM)

	Intellectual	Language Arts	Science	Math	History, Social Studies	Leadership /Interpersonal	Adaptation e.g., Problem Solving	Artistic Talent	Performing Arts	Creative Thinking	Critical Thinking
Teacher Nomination											
Grades											
Standardized Tests											
ORCA Activities											
Peer Nomination											
Self Nomination											
Interview											
Other											

IMPLEMENTATION

A reconceptualization of giftedness emphasizing multiple abilities was seen as essential to program success. To help insure district support and involvement, the program, its goals and objectives were outlined in meetings with superintendents, principals, and gifted and talented coordinators. After obtaining district level support, the program was introduced to teachers by STREAM staff or by key liaison personnel in the district. Staff development offerings followed, and parent meetings were organized.

Student nominations (sixth or seventh graders) for STREAM were requested of teachers both in the fall and spring. To assist in identification, teachers were given descriptors (behavioral indicators) of giftedness in those areas included in the definition (e.g., academic, creative, leadership). They were asked to recommend three minority students in each category. It was requested that special consideration be given to students deemed to be underachievers; potential was stressed. Students named in any one category more than three times were screened. Concurrently other data were collected: grades, test scores, art assessments, peer recommendations among others. (Three non-traditional approaches will be discussed in the following section.) Focus was on finding students who were eligible for gifted programming but not previously identified.

In some instances, selection of the top 5 percent from any measure resulted in initial assessments of as many as 30 percent of the students being screened. Although this proportion may seem inordinately large for effective programming, we felt this to be an appropriate approach given the historically inaccurate assessment of minority students, and the age of the students. Further, by identifying students in multiple talent areas, we could better inform schools about the potential of their students and suggest areas where individual students should have opportunities to actualize their potential. After reviewing data, final identification for STREAM was made following an interview with the student and, when possible, parents or guardians. Motivation and personal life factors were considered at that time.

Figure 2

Criteria for Teacher Identification

Students who have ability or high potential in the following areas may exhibit any or all of the criteria listed for that ability. (All of the characteristics do not need to be present for a student to be placed in the category.)

1. Leadership: Organizes, mobilizes, catalyzes others to behave in certain ways; understands others' needs and motives; communicates well; identifies self as a leader; and usually is independent, resourceful, and self-sufficient.

2. Problem Solving: Gathers information about a problem; studies information carefully and objectively; generates several possible solutions, develops ways to evaluate solutions; considers the costs and benefits of solutions; knows about resources and how to use them.

3. Intelligence: Learns quickly and easily; deals with information in complex ways; understands ideas in depth and breadth; usually is curious and questioning and shows interest in universal issues and problems.

4. Creativity: Sees things in unique and unusual ways; imaginative; creates unique products; interprets content in original ways; wonders what if...?; may say things that seem bizarre or wild; often asks provocative questions.

5. Athletic Ability: Well coordinated; physically adept in one or more sports; identifies self as an athlete.

6. Artistic Ability: Highly effective and/or imaginative in expressing ideas and feelings in some medium such as music, art, acting, or dance; is exceptional in the ability to stay with a task in the medium; often self-sufficient and experimental; identifies self as an artist (musician, dancer, etc.).

7. Math Ability: Finds math easy and enjoyable; quickly learns new skills and concepts and understands many concepts without regular instruction; seeks more complex and challenging math problems.

8. Verbal Ability: Communicates in exceptionally effective ways; speaks easily and has a broad vocabulary; usually expresses self in writing in an effective manner.

9. Reading Ability: Reads 2 or more levels above grade level; enjoys reading; interprets what is read in terms of deeper meanings and literary significance; understands the universality of literary themes, such as conflict, power, etc.

10. Science Ability: Learns quickly and easily in science; motivated to spend time reading about science and working on science projects; is especially good at observing, hypothesizing and evaluating; enjoys gathering data and experimenting.

11. Computer Ability: Enjoys working with computers and spends a great deal of time doing so; quickly learns computer skills; experiments with computer programs and often develops own programs.

12. Motivation to Learn: Strives to know and understand; studious; committed to learning more and more about a subject; often works very hard.

13. Understanding of Others: Sensitive to others' feeling; aware of others' needs; understands others' motives; is a good listener.

Current Enrollment. Currently 264 students are in STREAM. Of this membership, 56% are females and 44% are males; most are in grades 7-9. African Americans comprise over half (56%) of the STREAM members, followed by Hispanics (36%), Asians (4%), Native Americans (2%), and students of mixed ethnicity (2%). Participants constitute about 5% of the minority population across districts. Current STREAM students will remain in the program during junior and senior high school; and each year new students in sixth and seventh grade will be identified, thus enlarging the "stream."

NONTRADITIONAL IDENTIFICATION APPROACHES

To promote the broadened concept of giftedness, STREAM staff studied areas where nontraditional approaches to talent identification might be developed. Three of these show promise: Art Is Elementary; Contextually Relevant Problemsolving; and ORCA (Opportunities for Revealing Concealed Abilities).

1. Art Is Elementary. Art ability was of special interest because prior interactions with African American and Hispanic students suggested many possessed exceptional artistic talent frequently left undeveloped. Further, the need to recognize and nurture art ability is well recognized (Eisner, 1990; Greene, 1987). Identification, however, often rests on product or teacher identification, a limiting approach in instances where students are not enrolled in an art class or where art offerings are minimal.

The Art Is Elementary assessment consists of drawing tasks taken from a well-developed art curriculum (Cornia, Stubbs, & Winters, 1983) which describes seven levels of ability with four "activity" or sub-stages in each. Conceptual and artistic characteristics of each level are described and templates provide examples of development at different levels. In the curriculum guide, the tasks are used to help the teacher determine a student's level of artistic development. They are used in STREAM to help identify students with advanced perception and skill in art.

The drawing tasks are open-ended, allowing students to interpret them in personal terms. Students are asked to draw a person, a house, a tree, and an animal, items common to all cultures. No other directions are given. Using the templates and level descriptors as exemplars, the art work is scored by matching perceptual and conceptual elements of student work with a level in the curriculum guide. Art work is placed on a level (1-7) and at an activity stage within the level. Evaluation of ability rests on artistic merit; no age or grade levels are involved.

2. Contextual Problemsolving. To eliminate culture bias in problemsolving situations, students were asked to solve problems which might be encountered in their home and school settings. The school problem dealt with school truancy; the following home problem was one faced by a young person in charge of younger children (a frequent occurrence in inner-city living):

> *It is a summer afternoon, and you are taking care of two younger children. You are doing this for a friend of your mom while the friend is at the store. Suddenly you realize that Jim has gone out the back door, and you have no idea where he is. Shannon begins to cry--loudly--when she can't find her brother. You have been told by the children's mother not to leave the house, but you know you have to find Jim. What are ALL the things you could do to solve this problem? Include any clever and unusual ways you can think of to solve the problem. Do not worry about others' opinions. Just write down all the things that you might think of.*

Responses were scored for fluency and flexibility (Torrance, 1966).

Research (Clasen & Middleton, 1991) on both the art and problemsolving tasks found them to be effective identification tools. In a sample (n=431) including 304 (69%) minority and 127 (29%) non-minority sixth grade students from three urban middle schools in the Midwest, the percentage of responses rated as superior was proportionate for non-white and white students.

The artistic products were coded by two independent raters. Inter-rater reliability was .96. Slightly more than 8 percent (35 students) were identified as having superior ability. Minority males did especially well. Of the 35 students identified, 21 (60%) were minority males. Of the 35 students, none had otherwise been identified for gifted programming within the school district.

Problemsolving measures were scored for ideational fluency (total number of solutions recorded) and flexibility (number of solution categories). The home and school situations ratings were only moderately correlated ($r_{fluency} = .46$) indicating the two situations were assessing problemsolving ability somewhat differently. The top five percent in each category (fluency and flexibility) for each problem were selected for screening.

The school problemsolving task identified roughly equal proportions of white students to non-white (50% white, 50% non-white for fluency; 56% and 44% respectively for flexibility). The home problemsolving task, however, identified 65% non-white students and 35% whites in fluency and 77% non-whites and 23% whites in flexibility. These findings suggest that demonstration of problemsolving ability is related to the degree of contextualization in the problem; that is, how well the problem relates to one's frame of reference. In this case, the problem faced by the baby sitter may have "connected" more with non-white students than the problem dealing with school truancy. Table 1 shows the number and percentage of students by ethnicity in the population and identified as gifted on the art and problemsolving tasks.

Table 1

Number and Percent of Students by Ethnicity in the Population and Identified as Highly Able on Art Is Elementary and Contextual Problem Solving

	Population		Identified	
Ethnicity	N	%	N	%
African American	283	66	84	67
White	127	30	38	30
Hispanic	18	4	4	3
Other	3	<1	0	0
Total	431		126	

3. Opportunities Revealing Concealed Abilities (ORCA). In some instances, students neither recognize special talents nor realize how good they may be from a normative perspective. At the same time, because of the relatively narrow academic focus of their interaction with students, teachers may neither see nor check for talents or abilities which are not on display in the typical classroom. Further, students may purposely conceal certain abilities. Certain talents such as those exhibited by students with practical intelligence or divergent creative thinking ability require venues which permit or even reward their presence. STREAM provided two venues which offered students opportunities to reveal special talents: improvisational theater and television production.

The life talents demonstrated in improvisational theater include the obvious communication skills involving expression of ideas and emotions, but also the macro skills of problem solving and decision making. The immediate skills of playing off another's ideas and being responsive to a context reveal adaptive skills and ability to think on one's feet. Television production allows students to use their skills in communication, problemsolving, and collaboration of improvisation. In addition, the students are required to manipulate a medium. Initial evaluation of these opportunities indicate they are extremely effective means of identifying multiple talents. In addition, they are fun!

SYSTEMATIC COMMUNICATION AND FEEDBACK

Critical to the implementation of STREAM is systematic communication. STREAM staff and school liaison leaders use such opportunities as staff meetings, home visits, and newsletters to keep teachers, students, and family informed. Feedback has been of particular benefit to the identification process. During the second year of STREAM, teachers reported better understanding of the program and expressed more confidence (and willingness) in nominating students. Nomination results verified their perceptions. Approximately 85% of the students recommended for screening the second year were invited to participate in STREAM, as compared to slightly less than 50% the previous year.

PROGRAMMING

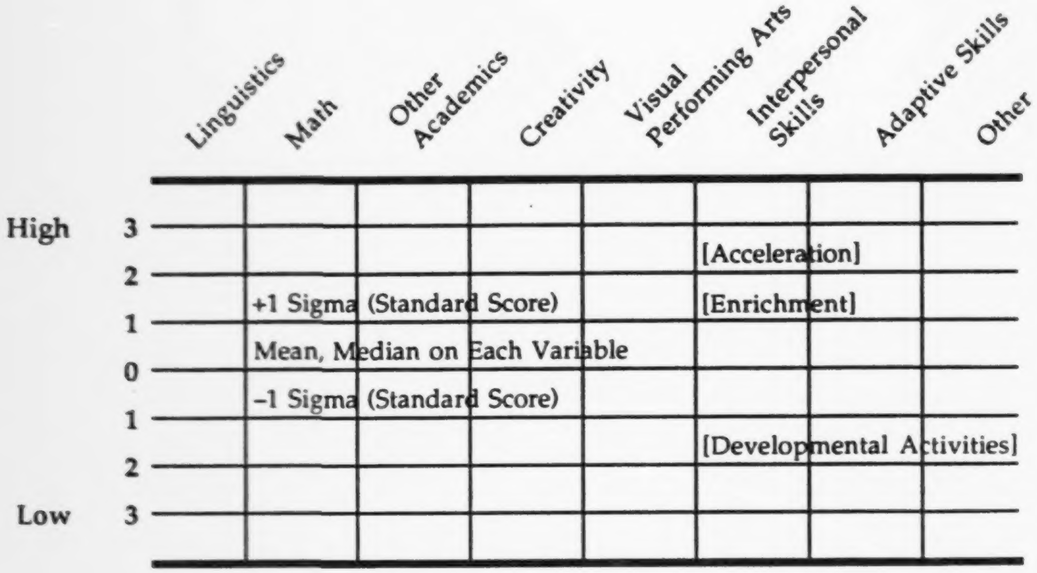
Programming is driven by student needs as identified in the Talent Identification Matrix (Figure 1). The word need has two thrusts here: (1) the need to build on strengths, with all of the associated implications for motivation, self-esteem and pursuit of excellence; and (2) the need to break down the discrepancy between what is and what should be in areas essential to successful academic and psychosocial development. If effort is placed exclusively on the second need, a remedial rather than a developmental program often results. STREAM's goal is to address both needs simultaneously.

Using the TIM data, student profiles are developed. The profile (see Figure 3) determines programmatic needs and provides the basis for recommendations to schools.

Students scoring more than 1 standard deviation above the mean on talent assessments are recommended for enrichment or acceleration in the talent area. Students scoring one or more standard deviations above the mean in math and language arts indices are recommended for accelerated classes. Students scoring more than one standard deviation below the mean in academic areas are identified for help in basic skills in order to enhance their eligibility for existing programs.

Figure 3

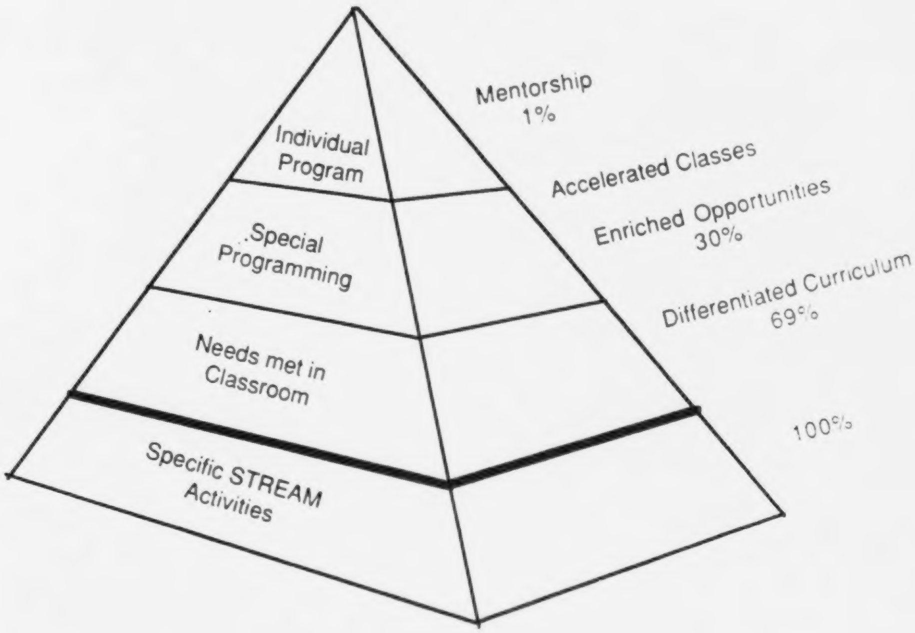
Student Programming Profile



Programming also follows the Wisconsin Pyramid Model (Clasen & Clasen, 1987) adapted from Cox (1987). This particular paradigm allows for student needs to be met within the regular classroom, by a combination of regular and special class offerings or by special programming for students at the apex of the pyramid. Figure 4 shows current programming for STREAM students.

Figure 4

STREAM student needs as met in the Pyramid Model



SIGNIFICANT FACTORS

Reviews of STREAM by participants and consultants indicate that four program aspects are especially successful and that reasons for their success can be identified. (1) Identification of students not otherwise identified. On the average, 82% of the students initially selected for STREAM are not otherwise identified for ability programming. The high percentage identified is attributed to four factors: a) systematic promotion of the concept of multiple talents; b) an inclusive approach dependent upon multiple data sources; c) outside (university) support and intervention; and d) insistence and persistence: insistence that students' talents and abilities exist and persistence in finding them. (2) Placement of students in existing gifted classes, such as accelerated classes, enrichment programs, etc. Approximately 30 percent of the STREAM students have been placed in one or more accelerated classes or enrichment programs. In one middle school, at the recommendation of STREAM, over 50 percent of the students were placed in the gifted program (PAT: Program for Academically Talented) following their first year in STREAM. Support for students from STREAM staff and key teachers has been a primary factor in placement success. Some students were hesitant to transfer to new classes; this meant leaving friends, different assignments, new teachers. Continuous support for the students helped them make the transfer successfully. STREAM staff also assisted in dealing with the resistance of teachers concerned about the new enrollees. (3) Students' college orientation. Initial surveys indicated that most STREAM students wanted to attend college; subsequent data indicate they are much more focused. Students report that the campus residency program and campus exploration days have been "extremely important" for career planning and for developing a serious future orientation. In a recent interview with two tenth-grade students, one noted that STREAM had helped them develop goals and direction: "I know I'm going to college. 'Aaron' and I have goals because of the program and lots of the tenth-graders don't have that direction...don't even think about it." Positive campus experiences at an early age seem a major factor in the development of a college orientation. (4) Academic confidence. Grade point average for STREAM students is close to 3.0. In one district, it is close to 3.5 with several students maintaining a 4.0. We believe factors contributing to achievement include systematic attention to students, teacher, and parent support, and students' pleasure in being in a program where achievement is encouraged, valued and expected.

What are the critical program factors? Eight have been identified by students, staff and parents:

1. Systematic and continuous attention to students;
2. Regular reinforcement for academic ability;
3. Reinforcement of abilities other than academic or athletic;
4. Challenge and high expectations, when they are accompanied by the support and resources needed to meet the expectations;
5. Opportunities to demonstrate "hidden" talents and abilities;
6. Parent/family involvement;
7. Campus experiences; interactions with campus role models;
8. Collaboration between universities and schools.

Surprisingly, the acronym STREAM has also been a help. The acronym not only captures the concept of this specific program but also the concept of gifted programming: it is dynamic, fluid and ongoing, the same but always different. It is impacted by its environment. It provides great resources when properly nourished. Our hope for STREAM was best expressed by one of the school superintendents: "May we have many streams and eventually seas of identified gifted and talented students and may under-representation of any group become a part of the past."

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Early Assessment for Exceptional Potential in Young Minority and/or Economically Disadvantaged Students

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Abstract

Using state of the art computer-aided technology Kent State has taken a leadership role in the development of a model for the identification of young gifted and talented minority and/or economically disadvantaged gifted students. Teams of primary classroom teachers, administrators and faculty from the College of Education have determined behavioral attributes of exceptional potential that can be observed during demonstration teaching in primary science and social studies lessons. A series of videotaped samples have been collected and analyzed using ViDATA (Zuckerman, 1990) in order to identify representative behaviors of young gifted minority and/or economically disadvantaged students. In addition, computer assisted training tapes have been produced for teacher inservice training. A Portfolio Assessment process, which uses methods of observational strategies, focusing on eighteen primary identifiers, is employed for each child in the class to determine a profile of student strengths.

INTRODUCTION

As knowledge about giftedness in special populations has grown, new approaches to the assessment of student strengths have emerged. At Kent State, educators have developed an experimental program designed to assess exceptional potential in very young minority and/or economically disadvantaged students. This multifaceted approach to the assessment of primary-level students focused on the extensive preparation and enrichment of primary classroom teachers. The model was designed with three primary goals: (1) providing access to gifted child education by historically underrepresented populations; (2) providing developmentally appropriate programming for young children to foster intellectual development; and (3) preparing regular primary classroom teachers to identify and serve gifted students.

NEED FOR EARLY INTERVENTION

The practice of relatively late identification of gifted children (Richert, Alvino & McDonnel, 1982) has continued despite substantial research that supports the contention that the early years, from birth to age 8, are critical to the child's development of self-esteem and self-image, social competence, emotional adjustment, personal value and habits, specific cognitive abilities and achievement motivation (Whitmore, 1986). Further, Whitmore has noted that intervention to prevent underachievement in gifted students is most effective in the first three years of school when perceptions, self-concept, and behavior patterns are being formed, and the time and effort required to reverse patterns of underachievement established in the K-3 years increases substantially with every year of delay in assessment and programming (1986, 1988). Even though identification of special needs and appropriate provisions in the early years are accepted practice in the education profession when dealing with other areas of diversity, early identification has not often been the case in gifted child education.

IDENTIFICATION OF MINORITIES

One of the most distressing findings in the 1980s was the failure to identify and serve minority and/or economically disadvantaged gifted students. Baldwin (1987) and others (Douglas, 1969; Frasier, 1987) contend the drop-out rate for gifted minority students is as high as 20% with an overall drop-out rate of over 50% for minority and/or economically deprived students. Furthermore, it is estimated that minority groups such as African Americans, Hispanics, and Native Americans are underrepresented by 30 to 50% (Richert, 1987) in gifted education programs throughout the United States. While it is not clear how many gifted students we never identify or appropriately serve, it is clear that schools are failing to motivate, retain, and develop the talents of many minority and/or disadvantaged students who could make major contributions to their community, region, or nation.

TEACHERS AS IDENTIFIERS

Teachers frequently fail to recognize giftedness in students who are not mature, high-achieving leaders, leaving significant numbers of gifted children unrecognized and underserved (Whitmore, 1982). Frasier (1987) notes three reasons for this problem in the case of minority children: (1) classroom teachers have not been systematically trained to observe; (2) the classroom environment may not be intellectually stimulating thus preventing the child from demonstrating ability; and (3) teachers may hold biased, inaccurate or narrow views of how giftedness can be manifested.

In reviewing these major issues in the field and seeking a solution, our research team believed that if universally recognized identifiers of intellectual potential could be paired with observational assessment, a method of identification could be created which would provide access for young gifted children from minority and/or economically disadvantaged settings. Consequently, this model could help to alleviate the problem of underrepresentation. Furthermore, the research team also believed that an appropriate teacher preparation program along with the use of systematic observation strategies would ultimately enhance the environment for all students in the primary setting.

EARLY ASSESSMENT FOR EXCEPTIONAL POTENTIAL

The Early Assessment for Exceptional Potential (EAEP) project was developed in response to these concerns and the federal government initiative for gifted and talented students (Shaklee, Whitmore, Barbour, Barton, Ambrose, & Viechnicki, 1989). The program is being implemented in three school districts, representing urban, suburban, and rural settings. Thirty-eight teachers in the three school districts are participating in the program. The composite demographic makeup of the pilot schools is as follows:

1. 16.6% of the population is African-American, .3% Latin-American and 82.2% Caucasian;
2. 50.3% males and 49.7% females;
3. 29.6% of students are classified as low socio-economic status.

The research team began with a series of questions to guide the development of the model. These included:

What are universal primary identifiers of exceptional potential?

How can we show primary teachers authentic examples of exceptional potential in young children?

How can we develop primary teachers' ability to observe student behaviors more accurately?

How can we help teachers collect systematic evidence of children's performance?

How can we help teachers "make sense" of the evidence they collect about primary children?

How can we prepare teachers to modify curriculum and environment based on evidence of student strengths?

How can we assess the impact of the model on teachers and students?

GOALS OF THE PROGRAM

The research team formulated these questions into five goals for implementation:

1. to develop specific strategies for improving the observational analysis skills of primary classroom teachers;
2. to instruct regular primary teachers on the systematic use of observation skills to identify exceptional intellectual potential in students from minority and/or economically disadvantaged settings;
3. to develop creative instructional strategies in science and social studies which foster intellectual development in a psychologically safe environment;
4. to prepare K-3 teachers to develop specific curricular modifications for regular classrooms, including individualization, based on identified student strengths and;
5. to establish a cadre of master K-3 teachers to assist peers in the use of observational analysis and the development of appropriate curricular modifications in their regular classrooms.

YEAR ONE

The project was initiated in Fall 1989, when the Collaborative Assessment Council (CAC) was created. The Council consists of university based faculty from gifted child education, early childhood education, and evaluation; primary level teachers from regular classrooms and special programs for the gifted; administrators and curriculum coordinators from five local school systems. The CAC functions as the advisory body for the project.

In Year One, the CAC focused on developing a set of exceptional potential identifiers, conducted a needs assessment of primary classroom teachers, and developed an observational management system. The results were: (1) a research-based list of universal primary identifiers with operational descriptions of examples; (2) an assessment of regular primary classroom teachers' attitudes, comfort and knowledge concerning assessment and education of exceptional potential; and (3) a portfolio assessment process for collecting and evaluating observational and self-report data from teachers, children, and parents.

PRIMARY IDENTIFIERS

Rather than focus on separate identifiers for groups of children represented by gender, race, class, or any other set of classifications, we determined to search for commonalities among and between groups.

This decision was predicated on the belief that while the manifestation of an identifier would be influenced by the environmental context or cultural heritage of the child, the identifier itself would remain consistent. For example, all young children can exhibit exceptional memory. However, it may be necessary to look for manifestations of exceptional memory beyond the traditional academic tasks and into areas such as exceptional memory for complex dance steps, or exceptional memory in storytelling or in remembering musical lyrics.

The research team began with an extensive review of the research literature. Lists of observable behavioral characteristics were collected and cross-referenced to determine those which occurred most often across groups of children. The specific items from original lists were synthesized to reflect common characteristics (i.e., keen sense of humor, use of puns, metaphor, and adult humor became one identifier). Eighteen identifiers occurred consistently in the research literature. The eighteen identifiers were sorted into four categories based on the relationships among identifiers. For example, exceptional memory, learns quickly and easily, and advanced understanding of an area were sorted into one group and placed under the heading Exceptional Learner (i.e., a child who demonstrates a developmentally advanced ability to acquire and retain knowledge). Following guidelines from National Association for the Education of Young Children (1988) with regard to appropriate use of systematic observations, the remaining identifiers were sorted into three additional categories.

Figure 1

Primary Identifiers

Exceptional Learner
(acquisition and retention of knowledge)
> exceptional memory
> learns quickly and easily
> advanced understanding

Exceptional User
(application and comprehension of knowledge)
> exceptional use of knowledge
> advanced use of symbol systems
> demands a reason
> reasons well

Exceptional Generator
(creator of knowledge)
> highly creative
> atypical thinking
> self-expressive
> keen sense of humor
> curiosity

Exceptional Motivation
(pursuer of knowledge)
> perfectionism
> initiation
> reflective
> long attention span
> leadership
> intensity

AUTHENTIC EXAMPLES

In order to provide authentic examples of the eighteen primary identifiers gleaned from the research literature and to validate their use in identification, six classrooms of identified intellectually gifted students representing grades K-3 were videotaped once a week for a six month period. These classrooms were selected because they represented similar populations in age, grade level, culture, ethnic origin, socio-economic status, and type of giftedness (i.e., intellectual) to the EAEP target population.

Forty-five hours of videotape footage was coded and analyzed using the computer program, ViData (Zuckerman, 1990). Inter- and intra-rater reliability was established at a minimum of .81. The videotape analysis yielded 457 examples of eighteen primary identifiers. A secondary screening of the examples based on accuracy of representation, cultural/ethnic bias, auditory, and visual clarity was conducted by five external reviewers. The final examples were used to create one master tape for pre/post assessment, four instructional videotapes for inservice use and one introductory tape of the program. The videotapes became an integral part of the teacher preparation program.

NATURALISTIC ASSESSMENT

Paulson and Paulson (1990) have stressed a multi-faceted, multi-dimensional process of portfolio assessment which includes all stakeholders, rationale for including items, and collection of information over time. Furthermore, the National Association for the Education of Young Children (NAEYC) has taken a strong position relative to the need for developmentally appropriate assessment for all young children stating in part:

> The practice of administering standardized tests to young children has increased dramatically in recent years resulting in retention, transition programs, or selective admissions. Such practices disregard the potential, document long-term effects on children's self-esteem and the fact that such practices disproportionately affect low-income and minority students. (NAEYC, p. 42, 1988)

These issues, coupled with the earlier concerns emerging from gifted child education, framed the team's thinking with regard to naturalistic assessment. Hence, we proceeded on the assumptions that the regular classroom setting should be the focus of the assessment effort; primary classroom teachers are professionally competent individuals who can make decisions about children; and a systematic, continuous system of observation can be used to make decisions about children and, subsequently, impact curricular change.

The Portfolio Assessment process is based on using ecologically valid observations of children in their own classrooms. It is grounded in the belief that cognitive processes are complex and varied. Therefore, the methods used to assess exceptional potential must be equally diverse. The process we adopted combined the use of observational strategies with multiple data sources in an on-going assessment structure. The process is designed to focus on the eighteen primary identifiers with each piece of evidence contributing to the global portrait of the child's potential. The eighteen primary identifiers are categorized into four groups of identifiers used to assess exceptional potential: 1) exceptional learner (acquisition and retention of knowledge); 2) exceptional user (application of knowledge); 3) exceptional generator (creator of knowledge); and, 4) exceptional motivation (pursuer of knowledge).

In September, primary classroom teachers began to collect six types of evidence from four audiences (i.e., parent/community members, teachers, students, peers). Evidence collection continued over a twelve week time frame. The evidence includes anecdotal records collected at a minimum of one for each child per week, observations of students during six demonstration lessons selected to elicit evidence of exceptional potential, a peer/self nomination questionnaire, a home/community survey, samples of products produced by the child which can be selected by the child, teacher and/or parent, and additional information from resource specialists. A portfolio was developed and used for all children in the classroom.

Using specific guidelines provided by the CAC, the teachers aggregated evidence to provide a profile of student strengths defined by the primary identifiers. First, teachers reviewed each piece of aggregated evidence in the portfolio. They were asked to look globally across all pieces of evidence and, using the four categories of identifiers, note the occurrence of any observations of the identifiers within the evidence collected.

In the second step, teachers were asked to rate their level of confidence that the evidence collected was a reliable and valid assessment of the child's ability. For example, a teacher may have marked low level of confidence if he or she believed that these particular strategies did not allow the child to demonstrate true abilities.

In step three, using both the notations of occurrence and level of confidence in the evidence collected, teachers marked an overall evaluation of exceptional potential for each child in the classroom. Three levels were used in the overall evaluation: **high** (consistent and substantial evidence has been collected); **moderate** (variation in evidence collected); and, **low** (little evidence has been collected to date).

Using the final evaluation, teachers determine the level of intervention needed. Working with cohorts of school-based faculty and university team members, teachers created an action-plan which details the level(s) of needed intervention for the students. Continued systematic observations, anecdotal record keeping and collection of student products were used to document student growth and change. At the close of the school year, the portfolio was transferred with the student to the next classroom.

STAFF DEVELOPMENT PLAN

Integral to the implementation of the model is the staff development provided for primary classroom teachers. The plan involves three elements: (a) the Primary Teacher Institute (PTI); (b) year-long inservice; and (c) follow-up contact provided by EAEP support team members.

A two-week Primary Teacher Institute initially prepared teachers. Because the Institute was designed to reflect the kind of developmentally appropriate inquiry teachers should promote, teachers were actively involved in discussion, reflection, guided practice, and simulation. The Institute was conducted by instructors from the field of gifted child education and early childhood education and the topics for consideration included: exceptional potential, cultural diversity, observational analysis, portfolio assessment, modification of curricula and environment, and creating peer cohorts (see Figure 2). In addition, the instructional videotapes of authentic examples were used to facilitate acquisition of knowledge about primary identifiers, to clarify misconceptions with regard to exceptional potential, and to assess pre/post Institute learnings.

In order to extend the foundation of knowledge provided during the Primary Teacher Institute, four 2-hour inservice sessions were provided during the school year, supplemented with bi-weekly contact from the EAEP support team. All contacts were designed to support the data collection and analysis of evidence in the portfolio as well as to design curricular intervention. Furthermore, the inservice sessions and bi-weekly contacts are an opportunity for cohort development, group problem solving and evaluative feedback to the EAEP team.

Figure 2
Assessment for Exceptional Potential

Student Name: ____________________

Evidence	Exceptional Learner	Exceptional User	Exceptional Generator	Exceptional Motivator	Degree of Confidence		
	Evident	Evident	Evident	Evident	Low	Med	High
Observations of Lessons							
Anecdotal Records							
Products							
Peer Nomination							
Self Nomination							
Parent Survey							
Other Information							

Overall Evaluation of Exceptional Potential		
Low	Med	High

IMPACT AND EVALUATION

Multiple methods of evaluation (i.e., structured and open-ended interviews, pre/post assessment using videotape, journals, classroom observations, anecdotal records, classroom maps, and long term student follow-up) have been used to document the impact and effectiveness of using a portfolio assessment process for the identification of exceptional potential with young children. The ultimate impact of this project is a longitudinal question; however, findings to date indicate substantive changes in the primary classroom and teachers.

This project seeks to improve teaching and the identification of young minority and/or economically disadvantaged students by: influencing teachers' attitudes, changing teachers' behaviors regarding the identification of exceptional potential, and, improving teachers' knowledge of and skills in systematic observation. The primary question to be answered is: Have teachers' attitudes and practices changed regarding the identification of exceptional potential?

TEACHER CHANGE

Changes in teacher attitudes have been documented through a variety of methods and can be categorized into three areas: change, affirmation, and significant learnings. Several key elements appeared to be important to the process of change in attitudes. These included participation in the Primary Teacher Institute and collection of the portfolio evidence. Comments from the participating teachers illustrate their professional change in attitude.

> "It is surprising who comes out showing exceptional strengths. It isn't always obvious that a student has these strengths."
>
> "The anecdotal records forced me to stop and really listen to the kids."
>
> "The long-term collection of materials is more enlightening."
>
> [This process is] "an extended effort to look for positive learning elements in every student."
>
> "The ways that educators can deny them [children] their giftedness was a significant realization for me."

TEACHER AFFIRMATION

Teacher participation in the program has also provided a means for group support and affirmation of teacher thinking. Recordings in reflective logs reconfirmed that:

> "Testing should be used along with a number of other factors in identifying gifted. Gifted behaviors may be manifested differently."
>
> "We can't depend on having gifted kids' needs met by someone else."
>
> "Problem-solving only works if you have created an environment for it."

TEACHER LEARNING

Finally, the last element of teacher development is related to the significant learnings they are using in their classrooms as a result of participation in the project. Comments included:

> "The awareness--of the constructs of giftedness discussed--will serve to make me more aware of student abilities and what I can provide in the classroom to meet needs."
>
> "Limited opportunities for learning should not be assumed to restrict the achievement of a child."
>
> "Eliminating barriers to identification of minorities. A good point: diverse groups = diverse expression = diverse procedures."

In addition, the teachers have expanded the use of the portfolio model, have used the portfolio evidence in parent conferences, special education intervention assistance, teams, and student/teacher conferences.

The quantitative data collected with regard to teacher development also substantiates teacher change. According to evaluation data, the participating primary classroom teachers indicated strong to moderate gains in knowledge with regard to giftedness, minority representation, observation strategies, and modification of curriculum based on student strengths. In addition, the analysis of pre/post assessment results which used the instructional videotapes indicated all teachers improved their ability to recognize and classify the videotape examples according to the primary identifiers. It is important to note that the pre/post assessment was not used as a traditional test of achievement. It was used to determine whether the use of authentic examples improves teacher awareness of the primary identifiers and accurate recognition of examples. Therefore, positive growth and improvement (not a predetermined score) is considered appropriate.

STUDENT IDENTIFICATION

Two evaluation strategies are being employed to determine the impact of using portfolio assessment on the subsequent identification of young minority and/or economically disadvantaged students. The first macroanalysis involves the research team in the process of analyzing the results of the first round portfolio assessment (n=900), to determine the demographic characteristics of the students identified as exhibiting exceptional potential (low, moderate, high). Students previously have been described by socio-economic status, gender, race, level of performance, and special education referrals. This information will be compared to demographic characteristics of students identified by traditional means for gifted education programs within the school site and school district. A comparative analysis will yield profiles of students identified through the non-traditional and traditional methods.

The second microanalysis is a longitudinal study of six children in the project. These students represent low, moderate, and high evidence of exceptional potential and have been selected as a representative sample by race, socio-economic status, and grade level. In addition to collection of documents (i.e., portfolio and action plan), systematic observation of the students and a teacher interview about the target students is being conducted. The objectives of these analyses are to determine changes in student behavior (including but not limited to performance) and/or attitude in school resulting from participation in target activities.

As noted earlier, qualitative comments directly from the participating primary classroom teachers indicated they believe the portfolio process afforded them the opportunity to identify student potential which would not normally have been observed in the primary classroom. Through interviews, journals, and questionnaires, the primary classroom teachers related stories about a child that they had not noticed and perhaps even ignored who was now being seen in a different light. It will be interesting to see if the macro- and microanalyses can shed further light on this process.

SIGNIFICANT FACTORS

There have been several factors which have contributed to the successful design and implementation of this program. Paramount to the success of the project has been the motivation, commitment, and quality of both university and school-based faculty. The genuine desire to work collaboratively, to discuss "thorny" issues and to resolve those issues to benefit children has been a key factor in the success of the program. Secondly, an orientation which benefits all students in the primary classroom includes the design of instructional strategies which will foster pupils' intellectual development. Another element which has contributed to the successful design and implementation of the project has been the conceptualization of the term "exceptional potential." Defining giftedness in its broadest sense, with a focus on potential, while searching for ways in which this might be manifested in the primary classroom for minority and/or economically disadvantaged students was congruent with the primary teachers' own beliefs about young children. The concerns about developmental discrepancy, experiential learning, cultural diversity, and inappropriate testing of young children were shared by all the group. These shared concerns provided a starting place from which to explore exceptional potential and the use of portfolio assessment to aggregate a portrait of student performance.

The collection of authentic examples through the use and analysis of videotaped data, and though encountering logistical and structural problems, appears to have contributed to the teachers' awareness and ability to accurately observe examples of exceptional potential in their own classrooms. The instructional videotapes are in the process of being edited. However, from the teachers' perspectives they were useful in providing a context from which to begin their own observations.

The staff development plan is one of the most successful elements of the project. The continuous, systematic preparation, and support of each teacher has been essential to the attainment of the goals for the program. Leaders in the fields of gifted and early childhood, as well as school-based coordinators and graduate assistants, have given teachers a network of contacts, resources and information from which to draw.

Finally, the current portfolio assessment process appears to have been a successful way in which to assess student strengths. Although no final evaluation has been completed, we have seen several indicators of success to date. First, no teacher has dropped out of the program. We believe that given the wide array of opportunities and challenges teachers face, the willingness of teachers to stay with the project is significant. Second, teachers have been able to use the portfolio process to identify students and have planned intervention activities to capitalize on student strengths. Third, teachers are using the evidence collected from the portfolio process for all students through parent conferences, special education assistance teams, and as a means to confer with individual students regarding their progress. The usefulness of the Primary Teacher Institute and portfolio process in learning more about their students has been underscored by the teachers many times.

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A Model Program for Identifying Young Underserved Gifted Students

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Abstract

Discovering gifted young children from disadvantaged, limited English-speaking and underachieving/learning disabled populations is the focus of this early childhood program. Multilayered identification practices include a standard multiple criteria gifted and talented selection process; a specialized diagnostic battery of instruments focused on critical and creative thinking; an identification process for multiple intelligences, as described by Howard Gardner of Harvard University; and identification through teaching. This process of filtering and assessing in the classroom occurs in small group and large group instruction. Checklists and portfolios are used to record teacher observations and student work. The chapter includes initial findings from tests and checklists administered in the project.

Early identification of gifted students is frequently recommended but seldom implemented. Most gifted programs begin in the upper elementary grades (Karnes, 1986). Delaying identification compounds problems associated with finding gifted minority students, especially those students from disadvantaged backgrounds. If such children are not found early, they are unlikely to receive appropriate instruction and may develop a poor self-image. Strom (1990) points out that "Teacher expectations seem to cause student self perceptions of ability. Early expectation experiences are seen as critical for minority children, suggesting that identification of talented and gifted minority children must come early."

Accordingly, Montgomery County Public Schools in Maryland, Johns Hopkins University and Catholic University are collaborating in a Javits grant that is designed to provide a model early childhood program in which gifted students from the population of economically disadvantaged, limited English speaking and underachieving or learning disabled children are identified and nurtured as early as possible. The model program is located in a primary school which has a 66% minority population, 32% of whom are speakers of other languages and 36% of whom are designated economically disadvantaged.

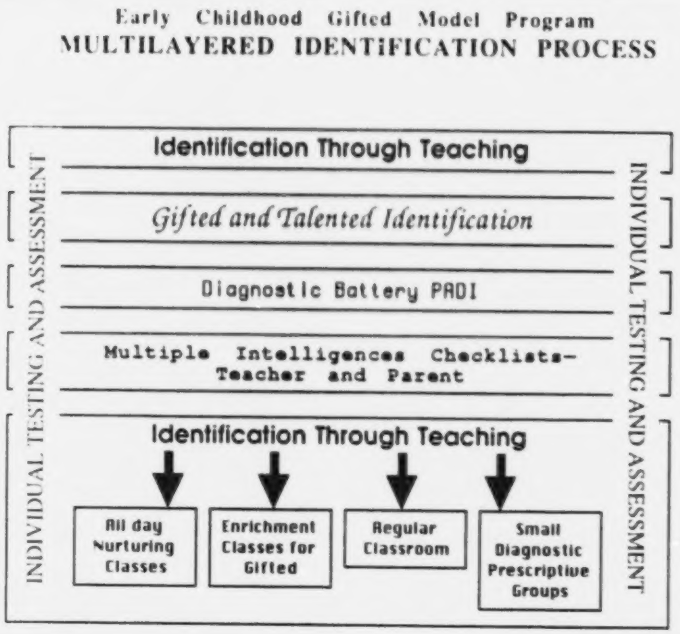
Not only does the program identify traditional gifted behaviors, but it also focuses on the broader view of intelligence proposed by Howard Gardner (1983). His multiple intelligences (MI) model includes spatial, logical-mathematical, musical, bodily-kinesthetic, linguistic, interpersonal, and intrapersonal intelligences (1983).

While the comprehensive nature of this project includes developing the program for young children, and involving parents and community institutions in program activities, a primary concern is alternative identification. This chapter will focus on the identification process used in the model program.

The project uses the concept of identification through teaching which Harry Passow and Abraham Tannenbaum (1978) proposed to Montgomery County early in our program development. The school district first experimented with the concept in a project called the Program of Assessment, Diagnosis and Instruction (PADI) which is now located in 30 county schools. Data from the innovative implementation in that project formed part of the knowledge base for this model program which aims at finding and serving young children with potential ability in preschool, kindergarten and the primary grades.

The Javits funding permits a full exploration of multilayered identification practices, beginning and ending with the concept of identification through teaching (see Figure 1).

Figure 1
Early Childhood Gifted Model Program


Early Childhood Gifted Model Program
MULTILAYERED IDENTIFICATION PROCESS
INDIVIDUAL TESTING AND ASSESSMENT
Identification Through Teaching
Gifted and Talented Identification
Diagnostic Battery PADI
Multiple Intelligences Checklists-Teacher and Parent
Identification Through Teaching
All day Nurturing Classes
Enrichment Classes for Gifted
Regular Classroom
Small Diagnostic Prescriptive Groups
INDIVIDUAL TESTING AND ASSESSMENT

MCPS PROCEDURES FOR SELECTION OF GIFTED AND TALENTED

The aim of the project is the identification of a greater number of disadvantaged or potentially handicapped students as gifted and talented, using county identification procedures. Formal guidelines used countywide for identifying intellectually and academically gifted and talented students are used to screen and place those students whose performance or potential ability indicates the need for differentiated instruction. The process and specific screening measures used in this project establish a sound multiple criteria identification process sensitive to finding able students in all populations (Starnes, 1984). Both subjective and objective information is gathered on youngsters, and the data are examined and decisions are made by a committee at the school level. Two teacher checklists and several verbal and non-verbal screening instruments are used. Teachers are encouraged to be advocates for students for whom the data on paper may not fully support inclusion in the program (Gifted & Talented Unit, 1987).

PADI DIAGNOSTIC BATTERY

The second layer of assessment is the PADI diagnostic battery which the county has used and refined for over ten years. It was developed under Title IV-C and Chapter II funding to improve identification of gifted Black and Hispanic students (Gregory, Starnes, & Blaylock, 1988). The diagnostic battery was validated in 1983 after administration to approximately 400 students. Results of this validation study are reported in the Journal of Negro Education (Johnson, Starnes, Gregory, & Blaylock, 1985). The diagnostic battery identifies able students across all racial groups and has also proved very useful in identifying gifted underachieving and learning disabled students. The rationale underlying this approach is to assess thinking, reasoning, and creative abilities while bypassing basic skills like reading and writing. Inclusion of both verbal/language and performance tasks has created a balanced process which is used annually to screen over 3000 students. Frasier (1987) complimented several aspects of the programs as reflecting "best practices."

The battery was adapted for use with kindergarten students in the model schools. It consists of seven assessment activities: The Cartoon Conservation Scale by Edward DeAvila (1975), Diagnostic Thinking Tasks, Peer Interviews, Rating Student Potential Checklist, Circles Activity, Draw-a-Person, and the Test of Progressive Matrices (Raven) (Gregory, et al., 1988). Most of the assessments, except the Raven, are conducted in the regular classroom with all students participating. The Raven is administered to one or two students at a time.

After the entire diagnostic battery is administered, school standards of performance are computed for each activity. This ensures that students will be compared only to peers in the model school. Students demonstrating strong performance, one or more standard deviations above the mean, on three or more activities, are placed in special full-time nurturing classes in the model school.

IDENTIFICATION OF MULTIPLE INTELLIGENCES

The third layer of identification is based on Howard Gardner's Model of Multiple Intelligences (MI) from Project Zero at Harvard University (1983). The model proposes that intelligence is varied, dynamic, and developmental and that it consists of at least seven discrete abilities or frames of the mind mentioned earlier. Teacher checklists for the Multiple Intelligences (MI) were developed, piloted, and refined for use in the model program. Members of Howard Gardner's research team at Project Spectrum, Mara Krechevsky and Thomas Hatch (1991), provided feedback and suggestions for the checklist during its development. Teachers complete the MI Teacher Checklist twice a year (see Figure 2). A parent checklist is also used to gather information on children's strengths in the various intelligences. Hatch suggests that MI helps teachers acknowledge the capacities each child brings to the classroom and blurs the line between curriculum and assessment. Children demonstrate their abilities to solve problems in different intelligences across different materials and content areas (1991). Teachers (working with this project specifically) identify

Figure 2

Checklist for Identifying Learning Strengths

CHECKLIST FOR IDENTIFYING LEARNING STRENGTHS

Child's name ______________________________ Teacher ____________________________

Grade __________ Date ________

Write the number (1 - 5) that most closely represents your overall observations of this child in each intelligence. You may check any behavior(s) you feel is (are) particularly strong for that child. Please add any comments you believe will help another teacher plan for this child.

1 - You have not observed these behaviors.
2 - You have occasionally observed them
3 - You have usually observed them.
4 - You almost always or always observed them.
5 - No opportunity to observe these behaviors

LINGUISTIC ____ (overall rating)

1. Enjoys word play; chooses to memorize and recite poems, tongue twisters, puns, riddles, etc.
2. Starts conversations or discussions on his/her own.
3. Expresses ideas easily either orally or in writing. Is a good story teller or writer.
4. Can give several meanings when describing an object or idea (e.g., how an object looks, how it's used.
5. Remembers and describes new ideas.
6. Readily verbalizes background knowledge and factual information.
7. Asks many questions.
8. Talks through problems; explains solutions.
9. Shows verbal ability in English, considering another language is used in the home.
10. Uses advanced vocabulary for age.

LOGICAL-MATHEMATICAL ____ (overall rating)

1. Chooses to play or work with number activities.
2. Finds number patterns or geometric patterns in the environment (e.g., tiles, flowers, leaves).
3. Joins smaller ideas into larger ones.
4. Can provide specific examples to support a generalization.
5. Finds ways to work through an unfamiliar number problem using own plan or strategy
6. Is able to plan or describe steps or events in order.
7. Groups objects and ideas in a variety of ways: finds similarities and differences.
8. Uses a systematic approach to problem solving.
9. Assembles puzzles with skill and enjoyment.

BODILY-KINESTHETIC ____ (overall rating)

1. Chooses motor skills (e.g., skipping, balancing, jumping).
2. Mirrors or repeats movements easily.
3. Readily masters hand (clap) patterns or steps.
4. Develops large muscle (gross motor) skills easily (e.g., roller skating, jumping rope).
5. Develops small muscle (fine motor) skills easily (e.g., tying shoes before kindergarten, draws unusually well for age).
6. Tries to master a new physical skill independently.
7. Prefers to touch and explore the shape of objects in order to learn about them.

Figure 2 continued

SPATIAL ____ (overall rating)

1. Chooses to express ideas through visual media or through interactions with objects in the environment.
2. Constructs and designs visual patterns.
3. Puts things together imaginatively to form a construction (e.g., collage, sculpture).
4. Shows an understanding of physical perspective.
5. Takes things apart and can put them back together (e.g., puzzle or mechanical objects).
6. Can organize and group objects.
7. Shows artistic appreciation: responds to color, line, texture.
8. Carefully plans use of space on paper.
9. Puts relevant details in drawings.

INTERPERSONAL ____ (overall rating)

1. Eager participant in group activities.
2. Initiates or makes offers of peer tutoring.
3. Meets own needs through adults and other people.
4. Expresses feelings to others.
5. Shows leadership; organizes activities including other children.
6. Chosen by others to help or join a group.
7. Easily builds relationships with others.
8. Shows strong sense of fairness in the interest of the group.

INTRAPERSONAL ____ (overall rating)

1. Self motivated, independent and resourceful.
2. Accepts ownership for one's behavior.
3. Self confident.
4. Empathizes with other children.
5. Has sense of humor.
6. Can laugh at oneself.
7. Sticks to ones beliefs.
8. Takes risks.
9. Concentrates on topics or tasks.
10. Plays creatively.
11. Persistent in self selected activity.

MUSICAL ____

1. Chooses musical activities.
2. Reproduces a newly heard melody or rhythm.
3. Composes rhythms, patterns, melodies.
4. Sings on key.
5. Identifies musical instruments heard in a musical composition.
6. Plays musical selections by ear.
7. Sings or hums melodically during independent activities.
8. Experiments with objects to create different sounds.

Comments:

____

____

____

children for various instructional groups based on the parent and teacher checklists as well as teacher and principal recommendations. These specialized teachers also maintain anecdotal information and contribute checklists for student files. Portfolios of children's work are kept by classroom teachers to help assess student progress and strengths in the various intelligences. The special grant teachers, specialists, resource teachers and the principal add comments and observations on insight cards. Portfolios and checklists are shared with parents to help document student strengths.

INDIVIDUAL TESTING

Early in the development of the project, the planning and evaluation group decided to give the Stanford-Binet Intelligence Scale to all 128 kindergarten students in order to provide base-line data. The Woodcock-Johnson Tests of Achievement were also administered to selected students. These test scores have been invaluable in several other ways. They provided additional specific information on students which adds to the PADI and GT assessments. The scores help with the selection of the students for special diagnostic instruction and provide direction and partial answers to knotty problems raised by teachers. Patricia Vail (1987) says that initial diagnosis of bright, learning disabled students provides the child's "intellectual fingerprints." She urges finding the gifts, nurturing these strengths, and originating units which liberate students to demonstrate their ability with less emphasis on the skills in which they are deficient. Finally, the scores provided conclusive information that most students in this economically and ethnically diverse population start school with at least average intelligence. This will be discussed more fully later in this chapter.

IDENTIFICATION THROUGH TEACHING

The fourth layer of identification is that which occurs in the teaching process. This layer infiltrates and informs each of the other layers and helps maintain continuous identification. Frasier had praised the process used in PADI because it "allowed project staff time to refine their judgments about individual students over a period of time while they were observing students' ability to meet the cognitive demands of the program" (1987). Alamprese and Erlanger (1988) identified such a pre-selection process as a promising practice; Tannenbaum (1987) called the prescribed enrichment of such a program the "vehicle of identification."

At the model school identification through teaching occurs in several ways: full time nurturing classes for students selected by the battery, specialized nurturing Multiple Intelligence pull-out programs, enrichment classes for the gifted, nurturing activities in the regular classroom, and diagnostic teaching sessions. Full-time nurturing classes exist at grades one and two in the model program. Students placed in these classes are identified by the battery as able in creative and critical thinking. As they interact daily with each other and the instructional demands of the program, teachers observe carefully and modify instruction to build on these strengths. While teachers do not neglect any aspect of the instructional program, they emphasize science and the arts as vehicles for engaging the students. Passow and Brandwein (1988) argued for science as the best content vehicle for finding young disadvantaged gifted students.

The nurturing MI pull-out groups focus on further identifying and fostering the multiple intelligences. Specialized teachers plan instruction which emphasizes problem-solving, science, the intelligences the child is capable of and interested in, and a linguistic link to school work. Teachers' notes from the pull-out sessions are combined with classroom observations and discussed during grade-level team meetings, school gifted and talented committee meetings, and at the school pre-referral team.

One of the teachers provides bilingual instruction in Spanish and English. This bilingual teacher frequently determines that a student has more ability through her teaching in both Spanish and English than classroom instruction in English alone would reveal. Cummins (1991) reports that young children can be perceived as deficient in thinking if they speak a second language with apparent fluency, when in fact they are communicating at a very concrete level. In order to develop higher level thinking, the child's conceptualizing must be nurtured in his or her primary language.

Another means of identification through teaching occurs via the diagnostic-prescriptive (D-P) strand in the instruction (Barton & Starnes, 1989). Regular classroom teachers' observations and questions as well as test data are used to select students for small group D-P instruction. The role of the special teacher is to ferret out the answers to questions posed by the diagnostic team of the project. This is a process of assessment and teaching in which the teacher carefully observes and hypothesizes about the next steps in instruction, based on the student responses. The bus game, structured assembly project, and other assessments designed for Project Spectrum by the research team at Harvard (as part of the development of the Multiple Intelligences model of Gardner) are used in these D-P groups as well as in teacher designed instruction (Krechevsky & Hatch, 1991). Here again, bilingual instruction frequently provides important clues. Both the nurturing and the diagnostic small groups explore MI strengths and focus on problem solving. The D-P group, however, is smaller, of shorter duration, and focused on one or two diagnostic questions.

The enrichment sessions provide 70 identified gifted students in grades one and two with several sequenced opportunities to identify and develop their strengths while exploring new areas of possible interest. Students are regrouped later in the year to concentrate on developing one area of interest or intelligence.

The identification through teaching approach by the regular classroom teachers is a crucial component of the program. Because the model program provides extensive training, teachers feel comfortable posing questions regarding students' progress. They ask for help from grade level teams, the reading teacher or the grant teachers, or propose the child for consideration to the pre-referral team called the educational management team. The model program has inspired a basic transformation of this pre-referral process much like that recommended by Chalfant (1984). The school principal led the team to redesign the process for teacher referral for special services. The principal also encouraged team members to focus on student strengths and teacher questions about learning patterns. Teachers no longer simply review evidence of the need for special services; they brainstorm with an emphasis on student strengths and intelligences rather than on the traditional remediation of perceived weaknesses.

FINDINGS

Teachers began implementation of the project with students in September, 1990. Early results are very tentative, but interviews with all teachers and staff in the spring of 1991 revealed that teachers were strongly influenced by the emphasis on MI and on nurturing thinking and problem solving with all children. The principal reported that teacher comments on report cards in November of 1990 (before they had been asked to share the information) contained specific mention of student strengths in MI areas and seemed much more positive than in previous years.

Case studies of selected students are providing rich information regarding patterns of different children and groups in the study. For example, one case study is an African American boy who received free or reduced cost lunch. He has a score of 116 on the abstract visual subtest of the Binet, 16 points higher than his verbal score of 100. At this stage, his peers and his teachers see him as able with strengths in bodily kinesthetic, linguistic, musical, and spatial areas. The final report of the project will include full case studies of several students.

Examination of the pattern of the individual test scores and comparisons of those scores with other identification data provides an interesting picture of this culturally and economically diverse population. The Stanford-Binet Intelligence Scale, Fourth Edition, was administered to 128 kindergartners during the 1990-91 school year in order to provide base-line data about the population. It was anticipated that these scores would be low and considered inaccurate because of the limited experience of many of the students. Instead, the average composite IQ was 109.

Table 1

Comparison of Stanford-Binet IQ subtests according to ethnic group and gender

	Asian		Black		Hispanic		White	
Binet Test	Male	Female	Male	Female	Male	Female	Male	Female
VR	81	95	100	102	99	96	118	114
AVR	102	112	102	105	106	106	113	113
QR	102	121	105	112	107	110	116	116
STM	90	103	104	105	97	101	113	114
Comp	93	109	103	107	103	104	118	117
Total	101		105		103.5		117.5	

N=128 (Asian female=9, male=6; Black female=19, male=25; Hispanic female=11, male=11; White female=17, male=30)

Note: VR=verbal reasoning; AVR=abstract visual reasoning; QR=quantitative reasoning; STM=short-term memory; Comp=composite IQ score; Total=average composite IQ score by ethnic group.

Examination of the data by race reveals that the composite IQ of all racial groups is still solidly average. (There were an insufficient number of Asian boys to consider that score representative of the population.) The pattern of scores by race and sex reveals that girls show particular strength in the quantitative reasoning subtest of the Binet. The difference between the average score on quantitative reasoning and the average score on verbal reasoning is statistically significant for Asian and Hispanic females. Although the difference is not significant for Black females, they scored 10 points higher on quantitative reasoning than on verbal reasoning.

Table 2

Correlation of Stanford-Binet IQ Scores with Spring Teacher Ratings of Multiple Intelligences

	Stanford-Binet IQ Subtests				
Intelligence	Comp IQ	VR IQ	AVR IQ	QR IQ	STM IQ
BK	0.080	0.096	0.135	0.048	-0.001
Inter	0.220	0.283	0.093	0.136	0.189
Intra	0.304	0.316	0.289	0.165	0.221
L/M	0.525	0.415	0.441	0.376	0.465
Ling	0.576	0.605	0.424	0.327	0.493
Music	0.111	0.163	0.099	0.104	-0.018
Spa	0.159	0.072	0.214	0.161	0.091

Note: Comp IQ=Composite IQ; VR IQ=Verbal Reasoning IQ; AVR IQ=Abstract Visual Reasoning IQ; QR IQ=Quantitative Reasoning IQ; STM IQ=Short Term Memory IQ; BK=Bodily-Kinesthetic Intelligence; Inter=Interpersonal Intelligence; Intra=Intrapersonal Intelligence; L/M=Logical/Mathematical Intelligence; Ling=Linguistic Intelligence; Music=Music Intelligence; Spa=Spatial Intelligence.

Table 2 displays the correlations between the scores on the subtests of the Stanford-Binet and the teacher ratings on the MI checklist. As would be expected, the highest correlations are between the logical-mathematical and linguistic intelligences and all the Binet subtests. The lower correlations for bodily kinesthetic, music and spatial intelligences seem to indicate that teachers are picking up abilities which have little relation to traditional school skills. The moderate correlations for Interpersonal and Intrapersonal intelligences probably reflect the fact that language influences the way in which teachers observe those behaviors.

IMPLICATIONS

The model program was developed to demonstrate how a project could mesh identification and teaching of young children in order to facilitate the selection of more underserved gifted students. Initial results are encouraging in regard to both changing teacher behavior and finding early signs of ability in children with limited experience.

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The Full Potential Program for Underserved African American Students

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Abstract

This schoolwide program model is based on a commitment to cultivate environments which will nurture the development of underserved African American gifted students. In Atlanta, the identification process developed to locate giftedness incorporates the Optimal Performer Locator for Teachers and the Optimal Performer Locator for Parents. Two other assessments designed specifically to reflect African American cultural expressions supplement these checklists in the identification process. This summary of the Full Potential Program also includes descriptions of curricular modifications, teacher education, and family training aspects of the program.

INTRODUCTION

In December 1989, the Atlanta Public Schools was awarded a three-year grant from the U.S. Department of Education to implement a demonstration project under the Jacob K. Javits Gifted and Talented Students Education Program. Entitled the Full Potential Program, the Atlanta Public Schools (APS) project is consistent with the overall goal of the federal government's effort to increase the proportions of economically disadvantaged or otherwise underserved groups in programs for the gifted and talented.

THE PROBLEM

An examination of enrollment patterns in Atlanta revealed that students who qualify for free or reduced lunch and African American males were disproportionately under-represented in the system's gifted and talented program, the Challenge Program. The Challenge Program is funded by the Georgia Department of Education and defines giftedness as follows:

> The gifted student is one who demonstrates a high degree of intellectual ability and who needs special instruction and/or special ancillary services in order to achieve at levels commensurate with his/her intellectual ability.

The traditional eligibility criteria for inclusion in the Challenge Program are:

Table 1
Eligibility Criteria for Challenge Program

Grade	Mental Ability Test Score	Achievement Test Score
K-2	99th percentile	NA/due to identification based on mental ability score
3-12	96th percentile	85th percentile composite or 90th percentile total reading or total math
K-12	99th percentile	NA/due to identification based on mental ability score

Using 1988-89 as the baseline year, 2,141 APS students qualified for the Challenge Program. Table 2 compares the proportion of economically disadvantaged students in the Challenge Program with the proportion in elementary schools systemwide.

Table 2

Proportions of Students Eligible for Free/Reduced Lunch

Elementary Schools Systemwide	Challenge Program (N = 2,141)
79%	15%

Students whose family incomes were low enough to qualify for the federal Free and Reduced Lunch Program were substantially under-represented in the Challenge Program.

Table 3 compares the proportions of students (1988-89) in each of six race/sex categories in the Challenge Program with the proportions systemwide.

Table 3

Proportions of Students in Race/Sex Categories

Race/Sex Category	Systemwide (N = 70,227)	Challenge Program (N = 2,141)
Black Male	46%	20%
Black Female	46%	30%
White Male	3%	22%
White Female	3%	26%
Other Male	1%	1%
Other Female	1%	1%

While black males represented 46% of the system's total enrollment, they constituted merely 20% of the Challenge Program enrollment.

THE RESPONSE

The Full Potential Program is an outgrowth of the school system's recognition that African American students (especially males) and economically disadvantaged students were under-represented in our state funded program for gifted and talented students. The Full Potential Program was designed to address this gross under-representation. The goals of the program are:

1. To increase the participation of African American (particularly males) and economically disadvantaged students in the Gifted and Talented Program by developing an identification process which is culturally appropriate for this population.
2. To provide an environment which nurtures expressions of giftedness by enhancing academic achievement, enriching creative talents, and ensuring the acquisition of historical and cultural self-knowledge.
3. To develop a cadre of teachers certified in gifted education, competent in specific academic focus areas, and knowledgeable about the culture of African American children.
4. To establish the Family Institute, which is designed to educate, encourage, and support the families' efforts to guide their children's development.

THE FULL POTENTIAL PROGRAM MODEL

The Full Potential Program is a schoolwide program, that is, the total school is impacted. All students are expected to be capable of high levels of performance and the school environment is structured to nurture students' capabilities, gifts and talents, and to provide avenues for their expression. The program has been implemented in nine Atlanta elementary schools with a total enrollment of 4,166. Within each school, one class at each grade level (1-5) is designated as a pilot class. A total of 1,170 students were served in the pilot classes. The first year, the criteria for pilot class enrollment were:

1. eligible for the state-funded gifted program, or
2. recommended for the state-funded gifted program, but failed to make the required ability test score, or
3. high levels of achievement, as evidenced on standardized tests, or
4. special talents, or
5. recommendation of the child's principal.

During subsequent years, the program's nontraditional identification process was developed and piloted.

The basic components of the Full Potential Schools program are described below.

School Cultivation

The philosophy of the Full Potential Program is based on the belief that many children have the potential for giftedness, but their environments are not sufficiently fertile to nurture its development and expression. For this reason, the program must be schoolwide one and school cultivation is an essential ingredient.

Full Potential Schools implement a variety of enrichment, motivational, and support activities for all students. These include the "My Buddy" peer tutoring program in which male students in grades 4-5 work with younger male students within their schools, the Word of the Day activity in which the entire school focuses on a challenging word each day, use of the *Science Weekly* newsletter in all classes, either individual school mottoes or logos representing the Full Potential concept reproduced on incentive items such as T-shirts, pencils, etc., staff development for all teachers, and special schoolwide programs. Additionally, each school receives the services of a half-time Full Potential Support Teacher who provides instructional assistance to all of the school's staff.

Culturally Appropriate Identification Process

We recognize that the potential for giftedness manifests itself in many ways, depending on the gift expressed, the age of the child, the culture and circumstances of the child, and the constraints imposed by the environment. The identification process developed and piloted in the Full Potential Program uses multiple criteria, many of which are specifically reflective of African American cultural expressions. These criteria are judged by those who know the child best, including families, peers, and informed teachers. The process incorporates the following data sources:

1) The Optimal Performer Locator for Teachers - This instrument, developed by Dr. Seward Hamilton, Jr. at Florida A & M University, is an individual student rating form completed by teachers. It is designed specifically for African American students (K-5) and incorporates expressions of giftedness which are culturally appropriate.

2) The Optimal Performer Locator for Parents - This instrument is the parent companion to the rating form described above.

3) A special adaptation of the WHO instrument provides peer assessments.

4) Student portfolios and student performances

The Optimal Performer Locator scales are behavioral rating scales designed to assess the degree to which selected students express or exhibit a range of characteristics, abilities and attitudes indicative of giftedness and talents, with emphasis given to African American cultural expressions. Using a Likert-type frequency scale, independent judgments are made by the child's parents and by his/her teacher. The piloted preschool scale is made up of 69 items, and the elementary scale piloted is composed of 64 items. The general areas assessed include: Leadership, Academic Acumen (math, science, language arts, social science, general), Creativity/Artistic Talents, and Cultural Competence. The Optimal Performer

Locator Scales are in the process of being refined and validated in the Full Potential Program.

We contend that this process is more valid for African American students than the traditional ability/IQ testing paradigm, which has effectively served to prevent access for African American students.

Curriculum Focus Areas

In addition to meeting all state and local requirements, the curriculum for Full Potential Schools also contains a specific academic focus area for each grade. These focus areas are designed to extend students' cognitive capabilities and challenge them beyond the regular curriculum. While the focus is required in the pilot classes, teachers may implement it schoolwide. The focus areas are:

Grade 1	Thinking and Writing
Grade 2	Future Problemsolving
Grade 3	Economics
Grade 4	Advanced Science and Mathematics
Grade 5	Continued Advanced Science and Mathematics, Spanish

Another important aspect of the curricular offerings in the Full Potential Schools is the infusion of African American history and culture. The entire Atlanta Public Schools curriculum has been rewritten over the past three years to ensure that a more accurate and complete view of human history is taught. Specifically, students are taught the story of African-descended people in the context of human history from antiquity to modern times. In addition, then, to the enrichment and academic focus areas provided by the program, students in the Full Potential Schools have the opportunity to see reflections of themselves as competent and courageous originators of and contributors to world civilization.

Teacher Education

All teachers in the Full Potential Program participate in staff development on the various aspects of the program including the identification process, expressions of giftedness in African American culture, effective pedagogy, the focus areas, etc. Additionally, teachers are offered the opportunity to receive add-on certification in gifted education by enrolling in classes at Georgia State University in order to acquaint them with the philosophy and pedagogy of gifted education. This effort changes the way in which all students are taught, thus cultivating the entire school environment. To date, approximately 30 teachers have completed this training for their certification.

The Family Institute

The Family Institute is comprised of families from the Full Potential Schools who have completed one or more cycles of the Family Institute training sessions sponsored by the program. These Saturday workshops have covered a wide variety of parenting concerns: conflict resolution, raising children in a global society, the survival of the black male, drug abuse prevention, the concept and nurturance of gifts and talents, etc. Participants receive a small stipend, a certificate of membership in the Institute, and a contract to provide a specific service to their children's schools as a requirement of membership.

The programs are planned by the Family Institute Advisory Council which is made up of a parent representative from each school, four members at-large, and program administrators.

PRELIMINARY OUTCOMES

The program is currently in its third year of operation and final outcomes will be evaluated at the end of the project period. The preliminary outcomes suggest that the program is having the intended effects.

The proportions of economically disadvantaged students served in gifted and talented programs in the Atlanta Public Schools system have increased since the inception of the Full Potential Program. The indicator used for socioeconomic status is eligibility for the federal free and reduced lunch program (see Table 4).

Table 4

Percent of Students Eligible for Free or Reduced Lunch

Gifted and Talented Program	Percent Eligible
Challenge Program (baseline)	23
Full Potential Program	35

In the baseline year (1988-89), 23 percent of the schools' Challenge students were economically disadvantaged. The Full Potential Program has increased the proportion of economically disadvantaged students served in gifted and talented programs by 12 percentage points.

The project has also had an impact on the numbers of black males served in the system's gifted and talented program. Table 5 shows the change in the proportions served in the baseline year and in program years 1 and 2.

Table 5

Proportions of Gifted and Talented Students by Race/Sex Categories

	% Black Male	% Black Female	% White Male	% White Female	% Other Male	% Other Female
Baseline Year (1988-1989)	20	30	22	26	1	1
Program Year 1	39	50	5	5	<1	<1
Program Year 2	39	52	4	4	<1	<1

The proportion of black males served in the nine Full Potential Schools' Challenge program was 21% during the year prior to the implementation of this project. At the end of year 1, this proportion increased to 39% and remained at that level in year 2. This represents an increase of 18 percentage points over the baseline year.

While performance on standardized tests is not a part of the selection criteria for the Full Potential Program, it is an outcome of interest. Table 6 shows the percentages of students in the program scoring at or above the national norm in reading, mathematics, science (grades 2 and 4), and social studies (grades 2 and 4) on the Iowa Tests of Basic Skills (ITBS).

Table 6

Percent of Students Scoring At or Above the National Norm on the Iowa Tests of Basic Skills, Spring 1990

	Reading	Math	Science*	Social Studies*
Full Potential Pilot Classes	93	94	95	84
Full Potential Schools	65	69	75	62

*Grades 2 and 4 only

Table 7 provides more detailed information showing the percentages of pilot class students scoring in each of the four percentile quadrants.

Table 7

Percent of Pilot Class Students Scoring within each Percentile Quadrant on the Iowa Tests of Basic Skills, Spring 1990

ITBS Subtest	1-25 %ile	26-50 %ile	51-75 %ile	76-99%ile
Reading Comp.	1	5	25	68
Math Total	1	5	14	80

Although there are no obvious direct comparisons because 1990 is the first year of data collection, and pilot class students were not identified prior to the fall of 1989, we do know that only 55% of students at Full Potential Schools scored at or above the national norm in reading in 1989 and only 63% scored at or above the norm in mathematics that year.

CONCLUSIONS

The Full Potential Program in Atlanta Public Schools is demonstrating that the numbers of African American and economically disadvantaged students served in programs for the gifted and talented can be increased by nurturing giftedness, using culturally appropriate identification procedures, training teachers and parents to maximize students' potential, providing an educational program which builds on students' cultural and historical heritage and which challenges them beyond the regular curriculum. It is a promising model for urban systems whose populations are predominantly African American.

Research for this paper was supported under the Javits Act Program (grant No. R206A02191) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. Grantees undertaking such projects are encouraged to express freely their professional judgment. This paper, therefore, does not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.

SPOTTING TALENT EARLY IN MINORITY STUDENTS:

PROJECT STEMS

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Abstract

The STEMS program of Howard County, Maryland was developed to supplement traditional assessment for gifted identification. STEMS (Spotting Talent Early in Minority Students) was designed to enable educators to locate gifted minority students in kindergarten through second grades. The model reflects the countywide philosophy of inclusion and represents a commitment to incorporate non-traditional measures as a means to identify all students who exhibit gifted behaviors. In the STEMS program, teachers are trained to observe characteristics among children from culturally diverse, low socioeconomic, or underserved populations by using specialized curricular activities designed to elicit manifestations of giftedness.

The goal of the schools in Howard County, Maryland, is to educate **all** children to their greatest potential. Recognizing that certain minorities are under-represented in gifted programs, the system focuses specific efforts on increasing the participation of minority students in its Gifted and Talented Program. Identification practices of STEMS (Spotting Talent Early in Minority Students), therefore, reflect an inclusive approach in which students are selected for programs using flexible and non-traditional measures which focus on unique behavioral traits among minority populations. Because Howard County has adopted Renzulli's Schoolwide Enrichment Model for instructors, all identification is based on looking for evidence of gifted behaviors fitting that definition.

THE GOAL OF STEMS

The goals of the pilot program, STEMS, reflect a commitment to increase the number of minority students spotted in the classroom, screened and selected for the gifted program. Minority students are defined as: "Those children, regardless of race or ethnic group, who may have language patterns and experiences, cultural backgrounds, economic disadvantages, and/or educational disadvantages or differences which make it difficult for them to demonstrate their potential on traditional identification measures of talented and gifted" (Brooks, 1984). The targeted populations for STEMS include children from groups typically under-represented in gifted programs: low socio-economic, culturally diverse, African American, Hispanic, American Indian and ESOL (see Figure 1).

The enrichment model in Howard County allows for various levels of enrichment for the entire school population. Students identified as a result of the STEMS initiative become a part of the Talent Pool. These students participate in a program of enrichment based on Renzulli's Enrichment Triad Model, (Renzulli, 1977; Renzulli, Reis & Smith,1981), offering Type II training designed to develop advanced level thinking skills and stimulate new interests in students. Weekly group activities in the Resource Room provide Talent Pool youngsters with opportunities to investigate and solve problems.

Figure 1

Targeted Populations for STEMS

Local School Population as of January 1991

White	64%
Black	28%
Asian	7%
Hispanic	-
American Indian	-

Percentage of students screened for G/T testing

	1987-1988	1988-89	1989-1990
White	78%	77%	74%
Black	14%	15%	18%
Asian	5%	6%	8%
Hispanic	1%	—	—
American Indian	n/a	n/a	n/a

Percentage of students selected for the G/T Program

	1987-1988	1988-1989	1989-1990
White	85%	78%	74%
Black	9%	14%	18%
Asian	4%	6%	8%
Hispanic	—	—	—
American Indian	n/a	n/a	n/a

DESCRIPTION OF THE MODEL

The mark of this unique identification model is the training of classroom teachers and cooperative planning efforts managed by the gifted and talented resource staff at county schools. Through a systematic observational protocol embedded in daily primary grade lessons, teachers are empowered to select youngsters whose behaviors are noticeably different along those dimensions considered characteristic of giftedness.

Specifically, teachers are trained to seek out the students whose advanced vocabulary is rich in expression and who are especially fluent and elaborate for this age. The program seeks to select children who use imagery in their speech and communicate well with others during group activities. Minority students who exhibit traits of task commitment, independence and risk taking are noted during daily activities. Exceptional abilities in the arts, athletics and/or creative communication are also highlighted as gifted behaviors in the STEMS program. Teacher training focuses on helping teachers spot the children who are able to improvise, who construct original products and who demonstrate leadership skills.

The STEMS process seeks to include primary aged children with these traits in the talent pool and Type III Enrichment programs in Howard County. It is the cooperative responsibility of the G/T resource teachers and K-2 classroom teachers to determine the minority students who exhibit specific behaviors, particular curiosity, interest, or excitement for learning. It is common for youngsters working at or above grade level to be selected for Gifted and Talented programming.

IMPLEMENTATION OF THE STEMS PROCESS

Prior to the inservice training conducted by the G/T resource teacher, a pre-questionnaire is administered to K-2 classroom teachers. Responses to this instrument will elicit the teachers' prior knowledge of characteristics of gifted minority students (see Figure 2). A post-questionnaire is later given to the same teachers after implementation of the program (see Figure 3).

Figure 2

S.T.E.M.S. Teacher Questionnaire (Pre)

S.T.E.M.S.
TEACHER QUESTIONNAIRE (PRE)

PART A. Check the space which most nearly describes your feelings.

1. I know the characteristics of giftedness displayed by minority students.
   not at all |_|_|_|_|_| very well

2. I feel that I _____ observe gifted behavior of minority students in my classroom.
   can |_|_|_|_|_| can not

3. Minority students can display gifted behaviors only in a classroom setting.
   agree |_|_|_|_|_|disagree

4. When I observe gifted behavior among minority students, I inform the G/T resource teacher.
   not at all |_|_|_|_|_| always

5. Minority students are adequately represented in the G/T programs at my school.
   disagree |_|_|_|_|_| agree

6. I am _____ of the goals of the S.T.E.M.S. Program.
   aware |_|_|_|_|_| unaware

7. I feel that I _____ observe gifted behaviors during the classroom process training sessions.
   can not |_|_|_|_|_| can

8. I _____ the differences between a child who demonstrates gifted behaviors and a child who is a good student.
   know |_|_|_|_|_| do not know

9. I feel that the S.T.E.M.S. Program is just another overload for teachers.
   agree |_|_|_|_|_| disagree

Figure 3

S.T.E.M.S. Teacher Questionnaire (Post)

S.T.E.M.S.
TEACHER QUESTIONNAIRE (POST)

PART A. Check the space which most nearly describes your feelings.

1. As a result of the S.T.E.M.S., more minority students have been tested for the G/T Program.
   agree |_|_|_|_|_| disagree

2. I know the characteristics of giftedness displayed by minority students.
   not at all |_|_|_|_|_| very well

3. I feel that I _____ observe gifted behavior of minority students in my classroom.
can |_|_|_|_|_| can not

4. Minority students can display gifted behaviors only in a classroom setting.

agree |_|_|_|_|_| disagree

5. When I observe gifted behavior among minority students, I inform the G/T resource teacher.
not at all |_|_|_|_|_| always

6. Minority students are adequately represented in the G/T programs at my school.
disagree |_|_|_|_|_| agree

7. I am _____ of the goals of the S.T.E.M.S. Program.
aware |_|_|_|_|_| unaware

8. More minority students than usual have been placed in the G/T program as a result of the S.T.E.M.S. Program.
disagree |_|_|_|_|_| agree

9. I feel that I _____ observe gifted behaviors during the classroom process training sessions.
can not |_|_|_|_|_| can

10. The inservice for the S.T.E.M.S. Program was
adequate |_|_|_|_|_| inadequate

11. I _____ the differences between a child who demonstrates gifted behaviors and a child who is a good student.
know |_|_|_|_|_| do not know

12. I was well trained in observation of gifted characteristics of minority students.
disagree |_|_|_|_|_| agree

13. During the classroom process training sessions I was
daydreaming |_|_|_|_|_| actively observing

14. I feel that the S.T.E.M.S. Program is just another overload for teachers.
agree |_|_|_|_|_| disagree

15. I knew what was expected of me during the classroom process training sessions.
no |_|_|_|_|_| yes

16. The S.T.E.M.S. Program should be continued next year.
disagree |_|_|_|_|_| agree

PART B. Please answer the following questions.

How can the inservice training be improved?

How can the observation form be improved?

How can communication between the classroom teacher and the G/T resource teacher be improved with regard to the S.T.E.M.S. Program?

INSERVICE TRAINING

In September of each academic year, the school staff participates in the sequential STEMS plan for identifying students with gifted behaviors. In addition to the regular classroom teachers, special area teachers certified in the disciplines of music, physical education, media, reading, resource rooms, and special education participate in the process. The inservice training highlights the county philosophy and commitment to STEMS, the goals and purposes of the program, and the following best practices: diversity within the population of gifted youngsters is best accomplished through an inclusive approach to identification, identification should occur early in the primary grades using multiple criteria, professionals and nonprofessionals should have an understanding of behavioral indicators of giftedness; and, attention should be given to the various ways in which children from different cultures manifest gifted behaviors. An orientation video illustrates examples of students' characteristics that teachers may observe during inservice training. The STEMS video, as an instructional resource, aids the Howard County public school staff in the clarification of gifted behaviors among these populations. Sample lessons plans are presented to instructors for practice distinguishing observable traits.

The STEMS program stresses the importance of recognizing behavioral indicators at any time during the school day, therefore, Special Area Teachers are also responsible for completing the STEMS checklist for useful identification data.

The observational checklist serves as a guide for teachers to locate youngsters who exhibit behaviors in ten categories. Frequencies of these indicators and/or combinations of the behaviors are tallied during each predetermined lesson designed for STEMS (see Figure 4).

Figure 4

S.T.E.M.S. Observation of Gifted/Talented Characteristics

S.T.E.M.S.

Observation of Gifted/Talented Characteristics

Teacher: ____________________
Grade: ________
Lesson # ________ **Look for:** _____
Date: ____________________

Directions: 1)List names of students who are to be observed.
2)Place a tally mark under the appropriate column EACH time that behavioral characteristic is observed during that lesson.

	LOOK AND LISTEN FOR STUDENTS WHO:	STUDENT NAMES				
A	Have an unusually advanced vocabulary for their age. Conversation reveals richness of expression, imagery, elaboration and fluency.					
B	Communicate well with others in group activities.					
C	Become absorbed in topics, problems or tasks. Are persistent in task completion.					
D	Prefer to work independently. Require little direction from teachers.					
E	Generate a large number of ideas or solutions to problems and questions.					
F	Are high risk takers.					
G	Are creative in finding ways to communicate: drawing, pantomime, body language.					
H	Demonstrate some exceptional ability in some area of the arts or athletics.					
I	Improvise with commonplace materials to create original and unusual products.					
J	Seem to enjoy being around other people. They are sociable and prefer not to be alone.					

IN-CLASS INSTRUCTION

Actual lessons prepared for Kindergarten-2nd graders provide the context for identifying gifted behaviors. Curricular modifications are made by changing or adding specific lessons to elicit characteristics of gifted and talented children. The **STEMS** Activity #120 Science of the Future shown below (see Figure 5) is an example of one such activity.

Figure 5
Science of the Future

SCIENCE OF THE FUTURE

GRADE First
CONTENT Science
ACTIVITY # 120

LOOK AND LISTEN FOR CHILDREN WHO:

A. Have an unusually advanced vocabulary for age.
F. Are high risk takers.

OBJECTIVE: Students will predict what science will be able to teach them in the future.

MATERIALS: None

PROCEDURES:
1. Discuss some of the "scientific breakthroughs" that have occurred during the 20th Century. List on the board.
2. Ask students if there are things about science that they don't know now but which they expect to learn in school at some point.
3. Have students make predictions about scientific breakthroughs of the future. List on the board. Examples could include: a cure for AIDS or another disease, carpets which never have to be vacuumed, cities in outer space...

ASSESSMENT STRATEGIES: Evaluate students' oral responses to determine if they are able to make predictions about what science will be able to teach them in the future.

As the G/T resource teachers instruct the youngsters, the classroom teachers simultaneously record observations on the grid (see Figure 4). The teachers also discuss future lessons, particular students, responses to the STEMS program, and candidates for the Talent Pool or Type III Enrichment. To facilitate cooperative planning for the benefit of gifted minority students, team level meetings are an integral part of the STEMS program.

PROGRAM RECOMMENDATION

A review of the STEMS observational data by the school principal, G/T resource teacher and classroom teacher is conducted for the purpose of recommending primary aged children for gifted programming in Howard County. Following the STEMS process, the students will be tested for participation in the Enrichment Triad Talent Pool class, or be placed in the Enrichment Triad Talent Pool class by an Alternate Pathways process in which selected children may also participate in Type III Enrichment. The first and second graders not placed in a talent pool class will continue to be observed and later reassessed.

CONCLUSION

The promising practices in gifted identification in the Howard County public school system are varied and extensive. The noteworthy STEMS project reflects the dedication and expertise of the gifted coordinators, administration and faculty who conceived of the pilot program now in place. Extending options for identification has allowed for inclusion of a wider representation of gifted youth in Howard County, Maryland.

Urban Scholars: Access to Excellence for Students and Schools

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Abstract

The Urban Scholars Program provides a rigorous academic program for talented urban youth from disadvantaged backgrounds. One strategy used to identify Boston public school students is an interview. Other instruments designed to recognize talent include an essay rating scale and a checklist of traits used by teachers to nominate students who demonstrate behaviors characteristic of gifted potential. The curricular component of the Urban Scholars project is also described in this chapter.

BACKGROUND

In March of 1990, the University of Massachusetts at Boston received funding from the Jacob K. Javits Gifted and Talented Students Education Program to continue to develop its Urban Scholars Program. Founded in 1983, Urban Scholars has been a successful model for identifying and developing the talent potential of urban youth. The goal of Urban Scholars is to provide talented urban students with the skills and attitudes necessary to achieve their potentials. This goal is achieved through a structured sequence of academic courses and activities designed to build higher level skills, task commitment and self-motivation. Urban Scholars currently serves 100 middle and high school students. Students who successfully complete the middle school component and enroll in one of the target high schools are automatically accepted into the high school program. High school students are eligible to participate through the summer following graduation from high school as long as program requirements are successfully met. Students who successfully complete the high school component are guaranteed admission to the university.

Structured around an after-school and summer core curriculum, Urban Scholars gives students rigorous academic training in an intimate and caring environment. The goal of the curriculum is to enable students to become independent and aggressive learners. As a university based program, we are particularly concerned with developing the tools for research and scholarship. After completing the core curriculum, students enroll in advanced classes offered by Urban Scholars faculty and ultimately in regular university courses. Upper level students may also choose to do internships or independent projects. The middle school component focuses on using math and science to solve problems. All students are involved in individualized academic, college, and career advising activities.

Urban Scholars works with three of Boston's public high schools, as well as with the public and private middle schools in the city's East Zone. The schools are located in racially segregated neighborhoods where poverty and the social problems it engenders are the norm. The majority of the students come from low-income families where neither parent completed college. Many are first generation immigrants who are struggling to learn English. Books, materials, and supplies are scarce. Drop-out rates are high; expectations and achievement levels are low.

It is clear from our experiences and from the literature (Baldwin, 1978; Frasier, 1979), that one of the critical problems facing talented urban students is that far too little in their school experiences contributes to the development of their talents. The first obstacle that we encountered when we started the program was the low level of expectations. A department head summed up a fairly pervasive point of view when he told us there were no talented students in the school--we were wasting our time looking for scholars.

Urban Scholars is an outgrowth of the federally funded Upward Bound Program. We knew from our work in educational opportunity programs that identifying talent in the schools was a necessary first step to helping the schools become excellent academic institutions. However, it was not sufficient. Time and resources must also be spent on working collaboratively with school personnel to enhance the capacity of the schools to develop the talent potential of all students. Thus, from the beginning, school improvement has been an important part of the mission of Urban Scholars. We began by joining committees and revitalizing academic awards ceremonies. Over the years we have been involved in a variety of projects ranging from facilitating career speakers to assisting with staff development activities. Receipt of the Javits grant in 1990 has greatly expanded our capacity in this area.

Through the Javits grant, activities are being implemented at the target high schools in three areas: enhancing the schools' ability to challenge their more academically able students, building a culture where striving for academic excellence is of high value, and strengthening guidance and counseling support for higher education. A mini-grant program encourages teachers to work collaboratively with university faculty and staff to strengthen and enrich their curriculum and to implement new methodologies. A pilot guidance course is offered to ninth graders at one of the high schools. The course focuses on building self-esteem and helping students to develop a sense of purpose about their education. Academic awards ceremonies and perfect attendance clubs are designed to reward achievement and good attendance. We know that more students' talents will be recognized and developed, if we can strengthen the learning experiences of all students.

IDENTIFICATION

When Urban Scholars began in 1983 we defined gifted and talented as "demonstrated exceptional potential for success in specific academic areas such as mathematics, science, history, or English, or in the arts, athletics, leadership, or community involvement." (Urban Scholars Report, 1983, p. 7) Over time our understanding of talent has been influenced by the work of Joseph Renzulli (1978) who asserts that "giftedness consists of an interaction among three basic clusters of human traits--these clusters being above-average general abilities, high levels of task commitment, and high level of creativity" (p. 261). Initially, because we were only able to serve a small number of students and we had much to learn about how to best develop students' talents, the program focused primarily on academic and leadership talents. More recently, we have been influenced by Howard Gardner's theory of multiple intelligences. We agree with Gardner that there are many kinds of intelligence and that motivation and desire are as important as aptitude (Gardner, 1990).

The identification process is designed to gather information from teachers, guidance counselors and other school personnel. These people are asked to nominate students who they feel have demonstrated exceptional potential for success in academic areas and to give specific examples of how the nominated students have demonstrated their talents. Students are also able to nominate their peers and themselves. A nomination form is used which is adapted from the Renzulli-Hartman Scale for Rating the Behavioral Characteristics of Superior Students (Renzulli & Hartman, 1971) (see Figure 1).

Figure 1

Urban Scholars Program Nomination Form

Name ____________________ Position ____________________________________

Organization/School ______________________________ Telephone # ____________________

Please list below the name of a student who you feel has demonstrated traits such as creativity, critical thinking, leadership, or a high degree of curiosity and high motivation and exceptional potential for success in specific academic areas.

Student's Name ____ Grade ________________

Area(s) of Strength ____

The following is a partial list of traits which may indicate that a student is gifted or talented. No one will exhibit all of the traits. For the student listed above, check those traits which you feel best describe him/her.

___ Is curious

___ Displays logical thinking skills

___ Has a keen sense of humor

___ Learns quickly through experience

___ Is talented in the arts (art, music, drama, dance...)

___ Is creative and original in his/her thinking

___ Is quite concerned with issues of right and wrong

___ Appears to put a great deal of energy into one area of ability while neglecting other areas/subjects

___ Makes unusual, creative, or "off the beaten track" statements

___ Is not easily satisfied with own speed or products

___ Gets along better with teacher of older students

___ Has won a prize or mention in a competition or contest

___ Is self-critical, sometimes highly self-critical

___ Has a large vocabulary

___ Is independent in thought and action

___ Takes initiative

___ Enjoys discussion classes

___ Sets high goals and ideals

___ Shows leadership ability in his/her peer group

___ Generally does average school work, but seems capable of doing a lot better

___ Can become so absorbed in a topic that s/he doesn't want to move to other topics

___ Is inconsistent in school work, but seems capable of doing a lot better

___ Is bored with routine but gets engrossed in challenging work

___ Often evaluates and passes judgements on events and people

Informational sessions are held with nominated students. Interested students participate in an application process which provides additional information on students' strengths and weaknesses. The process is also designed to assess motivation and task commitment. Students are asked to complete an application form, write three essays, submit a school transcript and interview with a staff member (see Figure 2).

Figure 2

Urban Scholars Program Student Interview Questions

Name of Student________________________ Interviewer________________

School________________________ Date________________

1. Review responses to application questions. Follow-up on answers, especially plans for work or study after graduation. What are your career goals? How do you plan to achieve them? How do your parents feel about your plans? What do they want you to do?

2. What do you like the most about school? The least? Why? What do you find most challenging about school? The least? Why?

3. Do you feel that your grades in school are a true reflection of your ability? Why? Why not?

4. Name a current event you've been interested in lately. Describe where you learned about it, i.e., tv, newspaper, magazine... Follow-up: Are there other current events that you have learned about from other sources? Why are you interested in this event?

5. What do you do in your spare time? Do you have any special interests or hobbies?

6. What do you think are your greatest strengths? Weaknesses?

7. Do you have any other major responsibilities other than work?

8. Problem Solving Question:

   Please take your time to think about the question I will now ask you. Try to use your imagination and think of the most unusual, interesting answers you can think of. Also, don't worry about giving what you think might be the "correct" answer. In this case there is no right or wrong answer, only the most original answer you personally can give.

   Pretend you are stranded on a desert island and have with you only the clothes on your back. What are a few of the most creative ways you can think of to deal with this situation?

The application form collects basic demographic data and, to assess the degree of continuity in their school experiences, students are asked to list the schools they have attended. For the essays written at home, students are asked to discuss an influential person or event which has impacted their lives significantly, to talk about what they consider to be the most interesting aspects of their abilities and personality, and to describe an activity, hobby or responsibility to which they devote a significant amount of time.

Figure 3

Urban Scholars Program Writing Sample Rating Sheet

Urban Scholars Program
Writing Sample Rating Sheet

Name of Student ______________________________ Rating ______________
School __________________________ Grade _____ Scorer __________________

____ **Category 1:** Good Mechanics/Lacks Creativity (Potentially fairly good to good writer)
Answered the question directly. Avoided irrelevant digressions. Used adequate, appropriate level of vocabulary. Generally sound mechanics--no more than 5 errors per 250 words. Logical syntax, demonstrates problem naming and/or solving. Communicates clearly in a straightforward by simplistic fashion; logical but unoriginal ideas expressed.

____ **Category 2:** Creative Writer/Weak Mechanics (Potentially good to exceptionally good writer)
Creative expression found in a sentence or two of otherwise poorly written essay. Student describes things with strong adjectives, injects humor, or describes an interesting or colorful fact or event. Weak mechanics--more than 5 errors per 250 words. Also displays originality of thought, social awareness, problem solving, and/or a play on or with words.

____ **Category 3:** Weak Mechanics/Lacks Creativity (Potentially average writer, very weak skills, often ESL)
Very weak mechanics--10 or more errors per 250 words. Illogical syntax, consistently incorrect subject/verb and tense agreement. Underdeveloped thoughts. Use of only the most rudimentary vocabulary. Does not demonstrate problem naming or solving.

____ **Category 4:** Good Mechanics/Fairly Creative (Potentially exceptional writer)
Displays some originality of thought, uses play on words--coining a new word or phrase, use of current slag in a relevant fashion, alliteration, use of simile or metaphor. Answered the question directly. Avoided irrelevant digressions. Generally sound mechanics--no more than 4 errors per 250 words. Logical syntax. Demonstrates problem solving or naming. Fairly well developed arguments, some supporting details, examples, use of comparing and contrasting.

____ **Category 5:** Fair Mechanics/Lacks Creativity (Potentially average-good writer)
Fairly sound mechanics--no more than 5-6 errors per 250 words. Answered the question partially or wholly, but not in a manner that demonstrates the ability to use transition words or phrases. Lacks paragraph/idea development, but does communicate the basic relevant information. Demonstrates basic but unoriginal problem naming or solving.

____ **Category 6:** Excellent Mechanics/Very Creative (Potential for excellence in writing)
Appropriate vocabulary, advanced vocabulary usage, good word choice. Well stated thesis. Well developed argumentation, strong supporting details, use of examples, contrasts and comparisons, humor, and/or anecdotes. Use of surprisingly effective metaphor, analogy, or simile. Play on or with words. Demonstrates original problem solving effective ability. Demonstrates the ability to name problems that may not be obvious. Good-excellent mechanics. Use of transition words or phrases to create variety and logical progression of thoughts. Demonstrates motivation, task commitment for expressing self through writing.

During the interview, the students also complete a spontaneous essay and take the Torrance Test of Creativity--Figural. Staff members determine students' problem solving abilities, their interests, motivation, and self-confidence, as well as their attitudes towards school and the future. The spontaneous essay is designed to measure students' creativity and problem solving skills. Essays are rated for creativity and mechanics using a specific form developed in this program (see Figure 3).

While the recruitment and selection process for the middle school component is similar to the procedure for the high school students, there are several differences. First, we are looking for students who have demonstrated talent in math and/or science. Parents of nominated students are invited to information sessions. Students are asked to complete an application form which involves responding to short answer questions which include giving a description of themselves, identifying their strengths and weaknesses, and listing their favorite school subjects. When they are interviewed, students take the Torrance, but do not complete a spontaneous essay. The interview focuses on assessing students' attitudes about math and science and the degree to which they have been exposed to scientific methodology and problem solving. In addition to submitting a transcript, they also submit any available standardized test data. All of the information gathered on a student is summarized on an Applicant Evaluation Form (see Figure 4).

Students are rated 1:Not Appropriate, 2:Good, 3:Very Good, and 4:Excellent. Staff then select students, starting with the 4s, to fill openings on the basis of the following criteria:

- subject grades of B or better preferred, but not required
- academic achievement in at least one area and the potential for even greater achievement
- evidence of talent in areas such as creativity, problem solving, leadership or unusual interests or hobbies
- motivation and a positive attitude toward self, school and future
- interest in the program
- racial and ethnic diversity
- the degree to which the student might benefit from the program

Figure 4

Urban Scholars Program Applicant Evaluation Form

STAFF________________

DATE________________

NAME OF STUDENT____

SCHOOL____________________________ GRADE____________

Note: For each category state the source of information on which you are basing your comments.

I. ACHIEVEMENT

A. What kinds of courses has the student taken in school? How has he/she performed?
B. Comment on the student's specific skills in the following areas:
Writing:
Reading:
Speaking:
C. Problem Solving (Refer to writing sample and oral question.):

II. ATTITUDES

A. Comment on the student's attitudes toward school, higher education. How fully developed are her/his educational goals? Does the student know how to achieve these goals?
B. Comment on career goals and interests. How fully developed are they?

III. PERSONAL QUALITIES

A. Comment on the student's motivation.
B. Why is the student interested in the program?
C. Comment on the student's commitment – involvement in extra-curricular activities, commitment to education.
D. Does the student have any other major responsibilities – family, financial, etc.?
E. Self-awareness. Comment on the student's understanding of her/his own strength and weaknesses.

IV. RECOMMENDATION

Should this student be accepted into the program? Why? Why not? (Rate candidates: 4=excellent, 3=very good, 2=good, 1=not appropriate)

RESULTS

To get a sense of the effectiveness of the identification process, we can look at the characteristics of the students currently enrolled in Urban Scholars. In terms of demographics, the 75 high school and 25 middle school students are a diverse group--45% of the participants are Black, 13% are White, 15% are Hispanic, 13% are Asian, and 13% are from other racial/ethnic groups including Cape Verdean, Native American, and Indian. There are more girls than boys in the program; 58% of the participants are female; 42% are male. Though some of the students come from families that have lived in Boston for generations, with similar or widely divergent origins, they are as likely to have been born in another country as they are likely to be non-white. Approximately 25% of the students are not native English speakers. Economically, all of the students are disadvantaged; 75% of the students come from low-income families, the other 25% can be classified as working poor.

Recruitment at the middle school level takes place in the spring of each year; the focus is on students who will be going into the seventh and eighth grades; 20% of the students entered the program going into the seventh grade and 75% entered going into the eighth grade. Middle school students are evaluated based on grades, standardized test scores, teacher recommendations, performance on the Torrance, and the interview. Two thirds of the middle school students enter the program with grade point averages (gpas) of 3.0 or better.

Three-fourths of the current Urban Scholars performed at or above the mean on Verbal or Math subtests of the standardized test offered by their school. While the number of students scoring above the mean on the Torrance Test of Creativity--Figural in fluency and flexibility is small, 15%, nearly a third scored above the mean on originality. More than half scored above the mean in elaboration. While the teacher recommendations and the students' responses to the interview questions are not quantified, the information gathered from these sources is discussed and considered seriously in the admissions meeting. Based on the comprehensive data students are rated 1 to 4. All of the students currently participating in the middle school component received a rating of 4: Excellent.

At the high school level, recruitment takes place twice a year; in the fall for January admission and in the spring for June admission. The focus is on ninth and tenth graders, occasionally a junior is accepted. Of the 75 students currently participating in the program, 49% entered as freshmen, 35% as sophomores, and 15% as juniors. High school students are evaluated based on grades, writing samples, teacher recommendations, performance on the Torrance, and the interview. Nearly two-thirds of the students entered with fair to good mechanical writing skills; a third exhibited creativity in their writing. Seventy percent of the high school students entered with cumulative grade point averages of 3.0 or better. On the Torrance, 18% of the high school students scored above the mean in flexibility. Approximately one quarter of the students were above the mean in originality and in fluency. More than half were above the mean in elaboration. In the high school program, 37% of the students were rated 3: Very Good; the remainder, 63%, were rated 4: Excellent.

A critical part of the philosophy of Urban Scholars is a belief that identification of talent is only half of the issue for disadvantaged students. Equally important is the process by which we work to develop their talents. To measure our effectiveness in this area, students' progress in school and in Urban Scholars is monitored on a regular basis. Report cards are collected at the end of each marking period. Half of the middle school students have current gpas of 3.0 or better; one third of the remaining students have gpas between 2.0 and 2.9. High school students are expected to maintain satisfactory academic progress-no Ds, no Fs, and no more than two Cs. As a result, 83% have current gpas of 3.0 or better.

Students receive evaluation letters from their Urban Scholars teachers once every two weeks in the summer and once every three weeks during the academic year. A final evaluation form is completed at the end of each course. The evaluations focus on study skills, cognitive, critical and creative thinking, and affective skills. Teachers are also asked to comment on the student's attitude and interest in the course and learning style. Because formal grades are not given, it is difficult to quantify students' progress in Urban Scholars courses. However, a veteran Urban Scholars faculty member eloquently summed up the progress that students make during their tenure in the program in an essay written for staff orientation. Petrucci argues that Urban Scholars can best be described by what they do not know when they encounter the program.

> First, they do not know how ideas work, so can't use them effectively. They lack the ability to make abstract connections, to symbolize, in effect, the real world. They don't have a true understanding, for example, of how an idea can progress through time, be represented as a theory, be subjected to experiment, and be applied from the realm of the pure to the practical. The idea of progress in history, the idea that language determines thought, the idea that global economies are linked to market forces beyond the manipulation of national policies, these concepts are as remote as Istanbul.
>
> Second, they do not, for the most part, have a strong well integrated set of basic skills which will begin to allow them the means to the knowledge of ideas they will need to compete on a higher plane. Quite simply, these are reading and writing skills. They don't really see the connection between reading and writing. They see it in a vague sense, that one acquires a vocabulary through a kind of osmosis. Few of them see language as something of great potential. Few of them use it well on paper.
>
> Are Urban Scholars capable of learning to use language in speech and writing, capable of forming abstractions, then linking the one with the other? Yes! We've lost precious few students over the years and graduates have come back to join the staff. Basic skills, cultural literacy, and confidence, these things are news in the education business; for us they are the stuff of daily concern, part of the ongoing challenge

which in the long run turns a typical Urban Scholar into a very capable undergraduate.

We measure the progress of students who complete the program through an annual follow-up survey. Since the program's inception in 1983 all of the Urban Scholars seniors have been accepted to at least two four-year colleges. Based on the most recent survey from 1990, 94% of the graduates matriculated in a four year institution; 88% of these students have either graduated or are still in school. This is compared to a national attrition rate of approximately 50% and the fact that fewer than 11% of the graduates of the Boston Public Schools go on to earn degrees from four year colleges. The situation is even worse for minority students in Boston--fewer than 3% of these students go on to earn baccalaureate degrees (*Boston Globe*, May 19, 1991). Many Urban Scholars have set records--the first student from Massachusetts to win the Elks Club's Northeast Regional Oratorical Contest, the first South Boston High student to attend Brown University, and the first minority student from Burke to graduate from Wellesley. One of our first Urban Scholars graduates joined the faculty this fall here at UMass/Boston. She is teaching in the English Department.

IMPLICATIONS FOR RESEARCH

Urban Scholars is designed to identify students who have above average skills in a particular academic area or areas, are highly creative, or exhibit a high degree of task commitment. It is clear from the profile of our student body that we are successful in identifying students who meet at least one of these criteria. It is also clear from our follow-up studies that we are having a significant impact on our students.

Two related factors add to the difficulty of analyzing the results in the identification and selection of the most talented students in the schools. First, the program is designed to supplement the regular school experience. Participation in the program is voluntary and requires a significant time commitment. Some students are not able to make this kind of a commitment due to family responsibilities or the need to work. Some have not made the connection between education and their options in the future and are not, therefore, prepared to commit time to an academic program. For some students activities such as sports are a higher priority than academics. Finally, some of these young people come from dysfunctional families. For many of them, committing to anything is difficult; their primary focus is on meeting their most basic needs. While Urban Scholars is able to provide some support to students with serious emotional and family problems, this support generally takes the form of a referral to an appropriate social service agency. For students who are motivated to work on their problems, this support can be effective.

A second problem in evaluating the identification process is the problem of a control group. Our application process collects information not normally collected by the schools. For example, the schools do not administer the Torrance, nor do they systematically evaluate students' writing in terms of mechanics and creativity. Furthermore, it is difficult to compare students based on measures such as grades. When we first started Urban Scholars we relied almost exclusively on grades as a measure of talent. We quickly learned that the grading system was not standardized. Some learners receive high marks because they do what is asked of them and they don't challenge the teacher--regardless of whether they have mastered the material. Others receive low marks because of attendance problems or they challenge the teacher. In this context, the data that are available suggests that our students are performing well above the norm in the schools.

Another research question that needs to be explored is the impact of the Urban Scholars Program on the schools. An integral part of the mission of Urban Scholars is to enhance the capacity of our target high schools to develop the talent potential of all students.

We are working to build stronger, more rigorous, and more caring school environments. While we know intuitively that we are beginning to have an impact on the overall quality of the schools, we have not evaluated this in a formal manner. The variables are complex and many factors are uncontrollable. To properly evaluate the impact of the Urban Scholars Program, an examination must account for the demand and enrollment in college preparatory courses, college attendance and completion rates, dropout rates, attendance rates and student achievement, as well as changes in the attitudes of teachers and students. Thus, a qualitative case study as well as a quantitative evaluation of our work at the three high schools is necessary.

In conclusion, while further qualitative and quantitative research must be conducted, the Urban Scholars Program is an effective mechanism for developing the talent potential of the students it serves. The program has also begun to have an impact on the target schools. For both the schools and the students, Urban Scholars raises the level of expectations and increases the possibilities; for students, this means that the world of opportunities is made more accessible. As a result of the Urban Scholars Program, students develop the essential learning tools and self-confidence to compete in our increasingly complex and technological society. By demonstrating the existence of highly talented students in the schools, school personnel are challenged to recognize and serve students in new ways. By providing resources and programmatic initiatives to the school improvement agenda, school personnel are encouraged to view themselves and their schools in new ways.

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The Search for Talent: New Methods for Assessing Student Strengths

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Abstract

This model for assessing gifted potential in elementary level students from under-represented populations includes non-traditional measures developed by the Texas Education Agency. The two assessments integrated into the instructional programs of the six diverse districts are the Texas Student Portfolio (TSP) and the Activity Placemats (Mats). These identification processes highlight talent searching through teacher nomination and the use of multiple criteria. The TSP described in this chapter focuses on behaviors associated with high performance rather than on discipline specific skills. Such practices yield information used in the instructional programs of gifted students from multicultural backgrounds.

"Who was the greatest artist who ever lived?" a newly defunct art critic asked Saint Peter on his way into heaven. "Why, it was Lucius Cadmore," answered St. Peter without a moment's hesitation. "But I never heard of him," said the sorely perplexed critic. "That's because he never had a chance to paint anything," Saint Peter finished, and turned his attention to the next entrant.

William Kornblum

BACKGROUND

In 1989, when grant funding became available through the Jacob K. Javits Gifted Students Education Act of 1988, the state of Texas was at a crossroads in the education of gifted students. Two years earlier, the Texas Legislature had passed a mandate that required all school districts to identify gifted students at every grade level and to develop programs that would meet their unique learning needs. Moving from local programs that had been developed on a voluntary basis to mandated kindergarten through grade twelve services that would meet the new state law would be a challenge - one that required the visible commitment of the Texas Education Agency.

Because the absolute priorities of the Javits Act included identifying and serving those populations that are traditionally under-represented in programs for gifted students, it had particular relevance to Texas. A statewide evaluation of local district programs had been completed in 1986 and revealed that Texas population statistics on students in gifted programs reflected national trends of under-representation of culturally diverse students. Even though racial and ethnic minority groups accounted for 37% of the total population of those districts reporting information, only 26% of the students included in programs for gifted students represented these same groups. At the same time these figures were being compiled, Ortiz (1989) noted that the U. S. Department of Education's Office of Civil Rights determined that, "minority groups such as Blacks, Hispanics, and Native Americans are under-represented by as much as 70 percent in gifted programs."

While these data reflected a picture that was disheartening in voluntary programs, it was considered unacceptable in programs that would be mandated and financially supported by the state. This was even more true in Texas, which, by 1992, was a state with a majority/minority school population. The Texas State Board of Education was determined to ensure that all the state's students were assured a fair and equitable assessment process. As part of its commitment to this idea, the Board passed a rule that stated, "Data and procedures used during the identification process shall be designed to assure that the population of the program for gifted students reflects the population of the total district."

GOALS

Passage of such a rule is only the first step. The next phase reflected the commitment that the state had in supporting district efforts to meet the letter and spirit of the law. The Texas Education Agency viewed it as an obligation to assist districts in finding procedures that would support full implementation of the rule. To meet this need, the Agency developed a Javits Grant proposal designed primarily to address student assessment. Developing and field testing new assessment measures would not be enough. By grant's end, training materials also would have to be completed so that teachers would know how to use the measures properly. The three objectives for the project reinforced this commitment. They were:

- To develop and field test non-traditional assessment measures that will support district efforts to identify and serve gifted students from under-represented populations;

- To develop and field test curricular materials that are designed to be used in programs for gifted students and to meet the needs of a multicultural population;
- To develop an "Adopt a School" support system in which trained teachers work with other educators to enhance teacher abilities to assess and serve populations underrepresented in programs for gifted youth.

The project's ultimate goal, then, is to assure that all children, regardless of socio-economic status, race, or ethnic group, have the opportunity to show their strengths and are not excluded because of cultural or environmental factors. This exclusion is harmful for many reasons. It is detrimental to subpopulations excluded from the program because it implies that they are less able than others. More importantly, it is harmful to the child who is overlooked, whose true talent is never discovered and never nurtured. It is the disheartening story of Lucius Cadmore, the greatest painter who ever lived, but who never had the opportunity to paint. Such a personal and individual loss can not be adequately or fully assessed; the accumulation of such losses are a national tragedy of untold proportions. The task we undertook was great, but so were the potential rewards.

SITES

Texas is an extremely large and diverse state. Its size, in part, dictated several aspects of the project implementation. At first, the plan focused on districts close to Austin that could easily be visited by agency staff. This choice, however, presented inherent shortcomings. How would we be able to convince teachers in rurally isolated West Texas or in the Spanish speaking community of Rio Grande City that the assessment materials developed in those settings would help them determine the strengths of students in their classes? To accommodate the diversity of the state, the agency turned to its network of regional education service centers. While all twenty regions were to receive and disseminate information on grant activities, six sites were selected to pilot the use of assessment materials. The sites were chosen, in part, to confirm that the various cultures that exist within Texas were represented. They ranged from major urban schools in San Antonio, to remote schools straddling the Mexican American border, to predominantly urban, African American school districts such as Beaumont, to rurally isolated schools with 100 students in prekindergarten through grade 12 in the Texas Panhandle. What all these districts had in common, however, were staff with steadfast determination to serve their student population more effectively, whatever its hue or language.

MEASURES

The two measures that are being field tested are the Texas Student Portfolio (TSP) and the Activity Placemat (Mats). One of the measures, the Mats, is used for teacher nominations, while the TSP is one of the multiple criteria used for program placement. Both of these strategies reflect a commitment to link more closely the assessment of student strengths to the instructional program offered to all students. They also are more consistent with general trends in the area of assessment, which focus on more authentic forms of analyzing student ability. Authentic assessment assumes that performance should be measured by observing students in activities that more closely resemble the challenges they will face in real life situations. Authentic assessments are not new; imagine a coach accepting a student as first string quarterback based on an objective test. However, while authentic assessment is a given in artistic or athletic endeavors, it is less accepted in other disciplines.

Both the Mats and the TSP shift the emphasis of assessment from objective testing to what Ernesto Bernal calls, "a search for talent" (1974). Bernal stresses the need to examine how quickly students progress in actual performance tasks rather than how they answer items on less direct measures such as school achievement tests. The emphasis, then, is on how students learn rather than on what they know. The two measures field tested during the Javits projects are used with **all** students in an effort to inspire them to reveal their areas of strength. In training teachers on their use, one surprise was how insecure most educators were in making judgements regarding student abilities and performance. One teacher, while commenting on how well a first grade student did on the Mats, stressed that the child could not possibly be considered for services in the gifted program because of his low test scores. Teacher reliance on test scores, rather than professional judgement, is one of the factors that we hope to modify through Javits project training. The TSP and the Mats encourage educators to teach to student strengths and to engage students in activities that support the evolution and development of students' special talents.

Although portfolios are becoming more common, the TSP differs from most other portfolios in two major ways. First, TSP products are self-selected by the student and products come from both in-school and out-of-school settings. The fact that students self-select the products is important because it makes them more responsible for their own learning and more conscious of their individual level of attainment. Students are encouraged to think about what they do best, how they might improve, and how they might chart their own progress in striving for excellence. Although sample lessons are developed that might lead to a portfolio product, teachers discourage the requirement of a battery of "portfolio lessons" that would be required by the student. By assuring the freedom to use products from both in and out of class, credit is given for real life experiences in which students excel, but that we do not observe in their classroom performance. A Product Information Card is completed on all products and students are given the opportunity to write or tell why they believe a product is their best work and why they want to include it in the portfolio. This information becomes very important during the review process. This aspect alone extends the search for talent beyond the four walls of the classroom and celebrates the unique voice of each student.

Second, the TSP focuses on behaviors associated with high performance rather than on skills related to specific disciplines. Each student product is assessed against the same eight descriptors, which are:

- unusual presentation of an idea;
- work advanced beyond age or grade level;
- complex or intricate presentation of an idea;
- in-depth understanding of a problem or an idea;
- resourceful and/or clever use of materials;
- evidence of support of research for an idea;
- evidence of organization to communicate effectively; and
- evidence of high interest and perseverance.

These descriptors focus on behaviors relating to learning, creativity, and motivation. They are not age specific and can be applied to children at any age or grade level. Therefore, the TSP offers a method of assessing progress over time, and items are collected for at least a semester before the portfolio is reviewed.

The descriptors that are used also coincide with several cognitive and situational characteristics that Archbald (1991) believes are critical for good authentic assessment. As examples, he notes that authentic assessments should focus on cognitive attributes such as producing instead of reproducing ideas, a notion that is captured on the TSP with the descriptor, "unusual presentation of an idea." In-depth understanding, another of Archbald's cognitive characteristics, is included in the descriptor "in-depth understanding of a problem or an idea." Situational characteristics are reflected in the use of materials and equipment involved in product development, acknowledgement that intellectual effort takes time, and the expectation that products are developed to meet specific aesthetic and utilitarian purposes. These concepts are captured in TSP descriptors: "resourceful and/or clever use of materials," "evidence of high interest and perseverance," and "organizes to communicate effectively" (see Figure 1).

No matter how research based materials are, they will not be used if teachers are not comfortable with them. In most cases, teachers are very enthusiastic about the TSP. Portfolios are reviewed by teams of educators who have been trained both on the characteristics of gifted children and on the descriptors included on the TSP. Each team member completes a form similar to the one included in Figure 1. They look at both the product itself and the information card which offers additional information on the development of the product. After all team members have completed their individual reviews, they discuss their findings and come to consensus on a total portfolio assessment. This information is then used as one criterion considered for placement in the program for gifted students. Although the review process can be time consuming, it yields information that can be used in the instructional program of the child. Teachers report that, as they become more familiar with the portfolio, the entire process can be completed more quickly.

Earlier, it was noted that many teachers are reluctant to trust their judgement regarding student abilities when test scores seem to contradict their beliefs. One possible reason is that primary and elementary teachers, who are the focus of the Javits project, are accustomed to rewarding students for retrieval of factual, content area information and not for such concepts as unusual presentation of ideas or persistence at difficult tasks. Project

Texas Student Portfolio Profile

Student's Name:____________________________ **Sex:**_____ **Grade:**_____ **Age:** _____years _____months

SES (Circle): High Average Low

Ethnicity (Circle): White Black Hispanic Asian Other__________ **Other Programs** (Circle): Bilingual ESL LD Speech Other__________

ITEM	DESCRIPTOR							
Date:	Unusual presentation of an idea	Work advanced beyond age or grade level	Complex or intricate presentation of an idea	In-depth understanding of a problem or an idea	Resourceful and/or clever use of materials	Evidence of support of research for the idea	Organized to communicate effectively	Evidence of high interest and perseverance
Date:	Evidence of support of research for the idea	Complex or intricate presentation of an idea	In-depth understanding of a problem or an idea	Evidence of high interest and perseverance	Organized to communicate effectively	Work advanced beyond age or grade level	Resourceful and/or clever use of materials	Unusual presentation of an idea
Date:	Complex or intricate presentation of an idea	Evidence of support of research for the idea	Resourceful and/or clever use of materials	Organized to communicate effectively	Unusual presentation of an idea	In-depth understanding of a problem or an idea	Work advanced beyond age or grade level	Evidence of high interest and perseverance
Date:	Organized to communicate effectively	Evidence of high interest and perseverance	Work advanced beyond age or grade level	In-depth understanding of a problem or an idea	Complex or intricate presentation of an idea	Evidence of support of research for the idea	Unusual presentation of an idea	Resourceful and/or clever use of materials
Date:	Evidence of support of research for the idea	Work advanced beyond age or grade level	In-depth understanding of a problem or an idea	Organized to communicate effectively	Evidence of high interest and perseverance	Unusual presentation of an idea	Resourceful and/or clever use of materials	Complex or intricate presentation of an idea
Date:	Work advanced beyond age or grade level	Resourceful and/or clever use of materials	Evidence of support of research for the idea	In-depth understanding of a problem or an idea	Unusual presentation of an idea	Organized to communicate effectively	Complex or intricate presentation of an idea	Evidence of high interest and perseverance
Date:	Resourceful and/or clever use of materials	Complex or intricate presentation of an idea	Unusual presentation of an idea	Work advanced beyond age or grade level	Evidence of support of research for the idea	In-depth understanding of a problem or an idea	Evidence of high interest and perseverance	Organized to communicate effectively

Developed by Dr. Sandra Kaplan for the Texas Education Agency

Composite Portfolio Rating:

_____ Below Average _____ Average _____ Above Average _____ Excellent _____ Superior

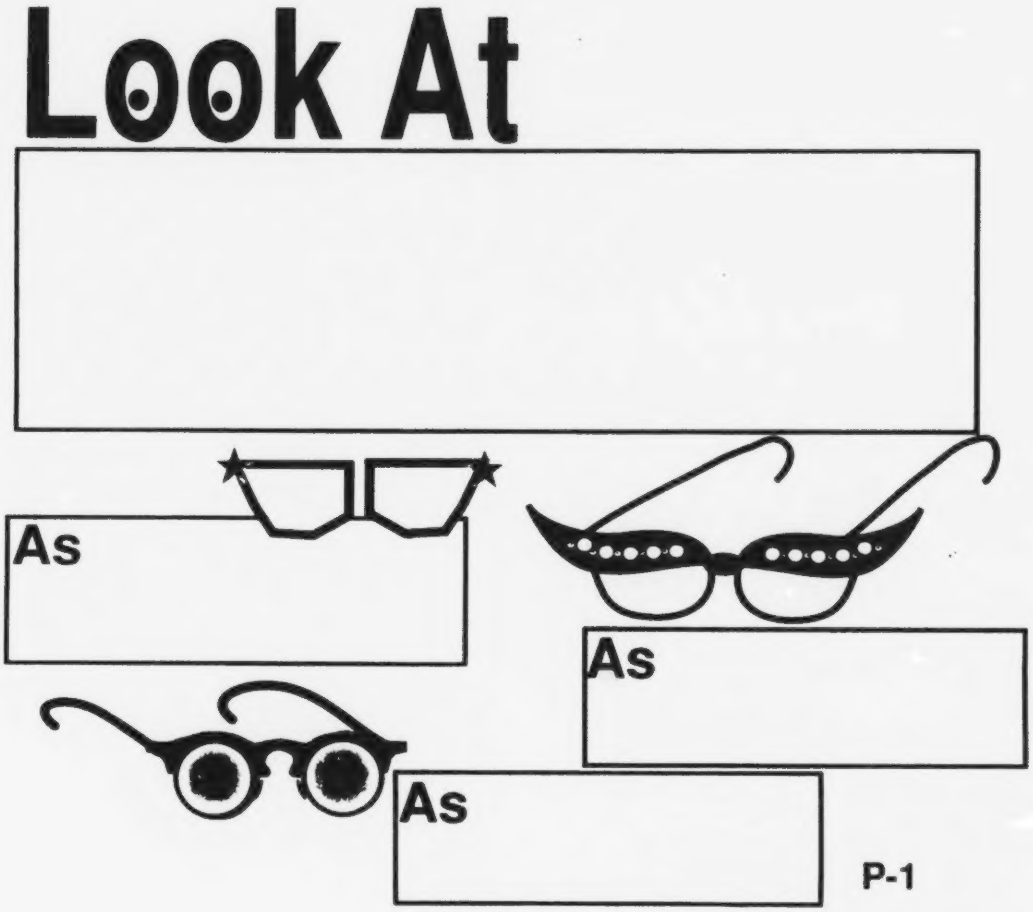
Instructional Implications: (If necessary, attach additional pages.)

staff are beginning to develop lessons that will support educators' efforts in teaching to these broader concepts. Although this will mean additional changes, teachers generally are enthusiastic about field testing lessons that support instruction of the eight TSP descriptors. By doing this, instruction for all children will be enhanced and geared toward a model that focuses on student strengths rather than one that ferrets out student weaknesses.

While teachers adapted to the use of the TSP with relative ease, the Activity Placemats posed another challenge. The Mats contain activities that are designed to determine the readiness level of students at skills such as identifying and constructing relationships, creativity, planning, hypothesizing, multiple perspectives, questioning, and developing vocabulary. Teachers use the Mats in conjunction with a "Jot Down" that includes the same skill areas. Teachers jot down the names of students who are very adept at these skills and nominate them as candidates for programs for gifted students. This is a good example of how assessment and instruction may be linked together. In fact, because the Mats also reinforce the use of certain skills, they can be used with students who need practice in the skill areas, encouraging them to develop greater competency in these areas. A sample Mat, which explores how students perceive things from multiple perspectives, is included in Figure 2. The Mats are content free, can be used with any discipline, and may be inserted as appropriate anywhere in a lesson. Additionally, like the TSP, the Mats can be used with students at any grade level, although in both cases, success has been greater at the primary and elementary grades.

Figure 2

Activity Placemat (Mats)



As an example, in a fourth grade history class the teacher might place a picture or model of a Native North American Indian in the large box on the Mat. Students would be asked to view the figure from the perspective of Christopher Columbus, a 19th century rancher, or an anthropologist. In an eleventh grade literature class a theme such as "power" might be written in the box, and a teacher might ask students to consider how this theme might be addressed in the writings of Ernest Hemingway, Stephen Crane, or Richard Wright. This type of activity is clearly open ended and requires that teachers encourage creativity and innovative responses. However, it also requires that teachers willingly **follow**, rather that **lead**, the path taken by student responses. Teachers focus on developing their own questioning skills to help advance the students further in their thinking. The Mats offer both teachers and students the opportunity to expand their arsenal of skills.

The Texas Education Agency's Javits project has focused on assessments that are a part of the instructional program for students. However, it also recognizes the valuable information that parents can provide regarding their children's potential. The agency is developing a parent handbook that focuses on student strengths and that can be used to support assessment of students. An important secondary objective of the handbook is the encouragement of parent/school communication that is supportive in nature and aimed toward ensuring that all students are provided appropriate experiences.

The future of gifted education will be determined in the next few years. If we are to enhance services for gifted students, there is a critical need to build support from educators in diverse fields. To do that, we must admit past errors, then move forward to build programs that are inclusive, programs that begin with a search for talent and culminate in its development. To do less would be to diminish the legacy left us by the namesake of the legislation that supports our efforts, Senator Jacob K. Javits.

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Talent Beyond Words

Identifying and Developing Potential Talent Through Music and Dance in Economically Disadvantaged, Bilingual and Handicapped Children

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Abstract

New processes to identify and train students with potential talent in music and dance are the focus of ArtsConnection's Talent Beyond Words. A multifaceted, multicultural curriculum provides a setting for identifying a wide range of creative and expressive talents in this project. The observational identification model, based on the theory of creative/productive accomplishments, is designed to be adapted to various artistic styles and techniques. Two checklists have been developed, one to evaluate performance in music and one to assess performance in dance. Descriptions of the comprehensive arts program and the integration of these new identification procedures are included in this chapter.

ArtsConnection, with support from the Jacob K. Javits Gifted and Talented Students Education Program of the United States Department of Education, has developed new processes to identify and develop the potential of talented elementary school students in music and dance. Through Talent Beyond Words, a wide range of creative and expressive talents can be recognized which cannot be assessed by written tests and, consequently, are often overlooked in school. The Identification Process of Talent Beyond Words is designed to be both reliable and equitable to students of all backgrounds, language abilities, and prior artistic experience. The process, based on performance observation of children in a multicultural, arts-oriented curriculum, uses clear, multifaceted, non-technical criteria that are designed to be easily adapted by schools around the nation.

The basic foundation of Talent Beyond Words is a comprehensive arts program in dance and music involving a series of professional performances, workshops and classes for grades three through six which provide opportunities for exploration, development and display of talent. A complementary intensive arts training program during and after school is offered to teachers, parents, administrators, and school specialists for the purpose of building understanding of and appreciation for the artistic gifts of children.

The educational philosophy of Talent Beyond Words arises out of thirteen years of experience in identifying potentially talented students in dance, music, theater, and circus arts in New York City elementary, intermediate, and high schools. Observations of the traits that lead to success in the arts in both accomplished performers and in untrained individuals has led us to adopt the Three Ring Conception of Giftedness, an interaction among above average ability, creativity, and task commitment (Renzulli, 1978). In the arts, as well as in other potential talent areas, these three factors arise in different combinations and at different times in each individual. A process of identification which allows students to be added to the core talent group at any time between third and sixth grade reflects those developmental differences and supports the view that gifted behaviors can occur in any individual at any time given the proper circumstances.

Two elementary schools of Community School District 15 in Brooklyn adopted this model of identifying and developing talent in populations in 1990. The students in these schools are typically poorly represented in traditional gifted programs. PS 27 (dance component) in Red Hook and PS 130 (music component) in Kensington are representative of inner city schools with a large percentage of disadvantaged students (approximately 70%), bilingual students (35%), and special education students (8%). The ethnic breakdown of the two schools is approximately 42% African American, 36% Hispanic, 18% White (with many recent immigrants from Eastern Europe) and 2% Asian. Through Talent Beyond Words, 200 students take part in the identification process each year in grade three and approximately 50 (25%) are selected for entry into the advanced core talent group. Fifteen hundred students observe professional performances in the auditorium and 40 teachers participate in summer and school year training sessions.

A research component, investigating the reliability and validity of the identification process and the profile of potentially talented students, is supplying important data about an area in which very little quantitative research exists. This research, by Dr. Susan Baum of the College of New Rochelle and Dr. Steven Owen of The University of Connecticut, is examining the effect of talent recognition and training on the attitudes and behavior of both students and teachers. Newly developed and existing instruments are measuring growth in learning skills, self-regulatory behaviors, and changes in self-esteem, self-efficacy, achievement, classroom behavior, and school attendance. Assessment of the teachers' understanding of the use of the arts and teachers' appreciation for multiple talents in their students is also being conducted.

PROGRAM COMPONENTS

- A yearly series of professional performances introduces the **entire school** to high level artistic achievements from different cultures and styles.
- All classes in grades three through five participate in a series of 5-7 **weekly workshops** with professional dance or music educators to introduce them to the art form and to select a group for advanced training.
- A **sequential training program** for selected students during and after school develops a variety of skills and techniques which will provide the foundation for in-depth talent development.
- **Training in the arts for teachers and school specialists** includes a variety of dance and music experiences, investigations into the nature of artistic talent and curriculum development during a week long summer institute, after school, and in weekend workshops throughout the school year.
- **Special events for parents** are scheduled to bring families into the school, professional studios, and theaters around the city to help them appreciate the talents of their children. Community arts events encourage the parents' awareness of the educational and professional opportunities available.

SUMMARY OF PRELIMINARY RESULTS AND HIGHLIGHTS

- The items on the checklists reflect content validity as judged by professionals in the respective discipline with no indications of bias or inequity in identifying children of different backgrounds, languages, and academic levels who have no prior training in the arts. The inter-rater reliability of checklists when used by experts is .70 (music) and .80 (dance). Teacher/expert correlations on a gestalt rating of students (accept, maybe, no) were .66 (dance) and .63 (music) after 5 weeks of teacher training.

- A large percentage of the students identified through this process would not be selected for gifted and talented programs based on standardized achievement tests or any other traditional assessment method.
- Participating teachers have increased their ability to recognize gifted behaviors in the arts in their students.
- The broad-based arts curriculum encourages the emergence and identification of multiple talents in dance and music.
- Families of selected students increase their involvement in school activities and attend special events.
- Positive changes have been noted in the climate and environment of the schools.

THE IDENTIFICATION PROCESS

Limitations of current processes, procedures, and instruments.

Assessment of general talent in the performing arts defies standardized measures. Lack of agreement, even among arts specialists in a single discipline, on a single set of criteria has hampered assessment. Most unidimensional artistic identification processes narrow the introductory experiences in order to observe a few critical indicators relevant to a particular technique. While that is an efficient method to discover ballet dancers with high arches or trumpet players with powerful lungs, it says more about the technical requirements of the technique than about the artistic potential of the child. These criteria can only be judged by specialists, and rarely allow for the discovery of other more subtle, and potentially more relevant, talents.

While music tests such as Gordon Measures of Music Audiation (Gordon, 1979) or the Seashore Test (Seashore, 1938) measure perceptual abilities, they do not allow the observation of interest, motivation, task commitment, or creativity. Student aptitudes are assessed in a static context. Further, although the test responses are pictorial, the test format is written, thus only students who perform well on written tests would be identified.

Ratings of performance during auditions are the most common identification processes used to select students for advanced music programs and ensembles. Evaluation instruments such as the Detroit Public Schools Creative Products Scale (Byrnes & Parke, 1982) and the South Carolina Guidelines for the Identification of Artistically Gifted and Talented Students (Elam & Doughty, 1988), however, assume previous musical training and a specific pedagogical base. With the elimination of music programs in financially pressed schools and the pressure on classroom teachers for improvement on standardized tests, students are not receiving the basic musical background that is required to discover their potential via such instruments. Furthermore, few disadvantaged students have the benefit of music training outside of school.

In dance, finding a fair and reliable identification process is even more difficult. Most existing criteria are unwritten and highly subjective, and generally, the processes consider potential for a single dance technique in single performance, audition settings. For example, the New Ballet School of the Eliot Feld Ballets/NY uses two expert observers to select a small number of children (2%) for ballet instruction based on their personal judgement of potential and vast experience in a particular domain.

While the Detroit Public Schools Creative Products Scale (Byrnes & Parke, 1982) includes a written form to record dance performance, it assumes previous training using both standards and terminology which come from ballet, but are also widely used in modern and jazz dance. The Connecticut Task Force Report Conn-Cept IV (White, 1978) and the South Carolina Guidelines for the Identification of Artistically Gifted and Talented Students (Elam & Doughty, 1988) also use technique based criteria that strongly favor training and previous knowledge of the art form.

Thus the problems that exist in processes, procedures, and instruments used in identifying untrained potential in music and dance among this target population are summarized below:

- Technique specificity: Narrowing the criteria to a single style or technique limits the talent pool and the range of talents which can be recognized.
- Dependence on prior experience: Parental support and financial status create inequalities which the assessment process does not balance.
- Language bias: In both written and performance tests, students vary in their understanding of the directions and format.
- Static nature of assessments: A single, one-time administration is too limited in assessing the student's full potential for involvement and concentration, and does not allow assessment of changes or improvement over time.
- Potential for anxiety: A single session places great stress on one single attempt to demonstrate strength. Children who are shy, tense, or are having a bad day may not be able to display their talent or potential.
- Lack of appropriate context: Test conditions bear little resemblance to the training situation.
- Difficulty of interpretation: Rating scales and checklists are not designed for use or understanding by non-experts, classroom teachers, administrators, or parents.

To counter the limitations presented above, the process that has been developed by ArtsConnection uses broad, behavior-based criteria. It has been designed to be understood by both arts specialists and novices. The procedure allows for both specific and general responses, and variety of styles and teaching methods are employed.

The specific criteria and vocabulary used to describe these talents are only a part of the issue. The whole process of Talent Beyond Words is designed to allow all of the students to give their best and to display a wide range of potential talents. This philosophy is communicated in every aspect of the program, beginning with preliminary meetings involving classroom teachers and the atmosphere they create in the arts class. The philosophy permeates the arts curriculum, and the responses of ArtsConnection panelists who conduct the process of identification.

Program Design

Third grade students participate in seven consecutive weekly workshops taught by a team of two professional artists representing different styles. A panel consisting of the two instructors, the classroom teacher, an ArtsConnection representative and an outside observer (school specialist or arts educator) mark a tally sheet for all of the students (counting occurrences of the behaviors listed in figures 1 or 2), give an overall selection recommendation and participate in a discussion immediately following each class. At the end of the seven week process, students are selected for participation in a core talent group. Fourth and fifth grade students repeat the process for five sessions and are re-evaluated on the same criteria.

Faculty

With the diversity of cultures and backgrounds represented in the schools, it is important to provide diverse instructional styles and role models. The instructors who conduct the student workshops also must have wide experience in working with classroom teachers and be flexible enough in their approaches to tailor a new curriculum to the needs of the schools and the goals of the program.

Instructors work as a team to balance instructional styles and artistic techniques. All instructors are on the ArtsConnection roster of artists and have 5-20 years of experience teaching their specialty in the New York City Public Schools. In addition, occasional guest artists provide instruction in areas not covered by the regular team.

Curriculum

The artistic curriculum developed as an identification process is based on eliciting diversity in strengths and modes of individual expression. It is a multicultural, multidisciplinary curriculum which strives to be sensitive and fair to students who learn in different ways and at different speeds, to students who are shy, and who have no previous experience in the arts. This is accomplished by varying the modes of teaching, the rhythmic and sound environment, the use or absence of verbal instructions, and the groupings and arrangement of students in the class.

The curriculum for the seven week identification series reflects the on-going training program which follows. Children are given a basic introduction to the elements of dance and music, challenges to master over time, and opportunities for personal expression. Each of the seven weeks has a different focus designed to highlight several of the identification criteria, although all of the items are a part of every class. Some of the same exercises are repeated each week, but observers know which criteria will be emphasized in particular lessons.

ArtsConnection

Key Words and Definitions for Identification of Talent In Dance

These concepts are being used to help focus the observer on some of the characteristics, processes and connections which can be recognized in students participating in a dance workshop. These are not exclusive definitions. Many of these behaviors overlap and may be functioning simultaneously in the fully involved dancer.

The focus of the workshops will change from week to week to allow students to demonstrate their full range of talents and to learn new skills which will help them express their own artistic nature.

SKILLS

1> **Physical Control**
knows by feeling
can make adjustments
can balance on one leg
has strength in legs, arms, torso
can maintain corrections

2> **Coordination and Agility**
can combine movements
executes complex locomotor patterns
can isolate body parts from each other
moves freely through space
responds quickly

FIELD TEST VERSION

3> **Spatial Awareness**
is aware of other people
adjusts to other dancers and the space
evens up the circle or line
is accurate in time and space

NOT FOR DISTRIBUTION

4> **Recall and Observation**
remembers information
can perform without following
can see and replicate movements accurately
can build sequences
observes details

NOT FOR
ITION

5> **Rhythm**
puts the beat in the body
repeats rhythmic patterns accurately
anticipates, waits for proper moment to begin
can find the underlying pulse or beat

MOTIVATION

6> **Ability to Focus**
directs attention
makes full commitment to the movement
is interested and involved in class
cooperates in team exercises

7> **Perseverance**
doesn't give up easily
practices
improves over time
takes time to think
tries hard to get it right

CREATIVITY

8> **Expressiveness**
shows pleasure in movement
performs with energy and intensity
is fully involved
communicates feelings
projects self

9> **Movement qualities**
displays a range of dynamics
communicates subtlety
moves fully
connects body parts
has a feel for timing

10> **Improvisation**
responds spontaneously
uses focus to create reality
gives surprising or unusual answers
makes independent decisions

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Dance Identification Instrument

Talent Beyond Words

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NAME________________________ **#**_______ **CLASS**________ **SCHOOL**_______

WEEK	1	2	3	4	5	6	7
PHYSICAL CONTROL							
COORDINATION/AGILITY							
SPATIAL AWARENESS							
RECALL AND OBSERVATION							
RHYTHM							
ABILITY TO FOCUS							
PERSEVERANCE							
EXPRESSIVENESS							
MOVEMENT QUALITIES							
IMPROVISATION							
SELECTION (1/2/3)							
TOTAL SKILLS							
TOTAL MOTIVATION							
TOTAL CREATIVE							

FIELD TEST VERSION

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DANCE IDENTIFICATION TALLY SHEET
Talent Beyond Words

FIELD TEST VERSION

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DATE_________ CLASS_________ SESSION #______ PANELIST_________________________

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Key Words and Definitions for Identification of Talent In Music

These concepts are being used to help focus the observer on some of the characteristics, processes and connections which can be recognized in students participating in a music workshop. These are not exclusive definitions. Many of these behaviors overlap and may be functioning simultaneously in the fully involved musician.

The focus of the workshops will change from week to week to allow students to demonstrate their full range of talents and to learn new skills which will help them express their own artistic nature.

SKILLS

1> **Rhythm**
puts the beat in the body
is able to sustain an even beat
replicates rhythmic patterns accurately
can play repeating patterns
anticipates, waits for proper moment to begin
can find the underlying pulse or beat

2> **Perception of Sound**
perceives differences in tone and pitch
responds to dynamics
can match pitches
can replicate melodic phrases
is able to sustain independent part

3> **Coordination**
moves easily through space
able to do two or more things at the same time
can control body in movement and freeze
sustains repeating patterns
works with both hands

MOTIVATION

4> **Enthusiasm**
responds joyfully
eager to participate
curious, asks questions
is open to unfamiliar styles of music

5> **Ability to Focus**
directs attention
makes full commitment to the task
is interested and involved in class activities
listens carefully
follows instructions

6> **Perseverance**
doesn't give up easily
improves over time
takes time to think
is able to take and use corrections

CREATIVITY

7> **Expressiveness**
responds with sensitivity
performs with energy and intensity
is fully involved
communicates feelings

8> **Composition and Improvisation**
improvises spontaneously
takes risks
makes surprising or unusual statements
creates sounds in original ways
makes up songs

FIELD TEST VERSION

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Music Identification Instrument

Talent Beyond Words

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NAME____________________ CLASS______ SCHOOL______

FIELD TEST VERSION

WEEK	1	2	3	4	5	6	7
RHYTHM							
PERCEPTION OF SOUND							
COORDINATION							
ENTHUSIASM							
ABILITY TO FOCUS							
PERSEVERANCE							
EXPRESSIVENESS							
COMPOSITION/ORIGINALITY							
SELECTION (1/2/3)							
TOTAL SKILLS							
TOTAL MOTIVATION							
TOTAL CREATIVE							

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May 6, 1991

MUSIC IDENTIFICATION TALLY SHEET
Talent Beyond Words

RHYTHM SOUND PERCEP COORD ENTHUS FOCUS PERSEV EXPRESS COMP/ORIG ☐	RHYTHM SOUND PERCEP COORD ENTHUS FOCUS PERSEV EXPRESS COMP/ORIG ☐	RHYTHM SOUND PERCEP COORD ENTHUS FOCUS PERSEV EXPRESS COMP/ORIG ☐
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FIELD TEST VERSION

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DATE________ CLASS________ SESSION #______ PANELIST____________________

PANELIST #______ CODE______

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DANCE

Session 1 - Rhythm
Session 2 - Coordination
Session 3 - Combine & Sequence
Session 4 - Movement Qualities
Session 5 - Spatial Awareness
Session 6 - Composition
Session 7 - Expressive Imagery and Body Language

MUSIC

Session 1 - Rhythm
Session 2 - Perception of Sound
Session 3 - Replication/Repetition
Session 4 - Phrasing
Session 5 - Coordination
Session 6 - Composition
Session 7 - Combine and Sequence

Observation Panel

The panel described earlier observes all seven classes. The fifth panelist may not be involved in the eventual selection of students, but contributes a different point of view during the discussion of students.

Immediately following each class, the panel has a 10-15 minute conversation while the students work quietly or are taken back to the classroom or library by other school personnel. Every child in the class is mentioned in the discussion. The artists, classroom teacher, and outside observer can share points of view, information, and reactions while checking their opinions, building a common vocabulary and coming to a consensus for final selection.

This discussion has been a key part of the process of training classroom teachers to understand the intention and the artistic approaches used in music and dance classes.

Teachers and artistic instructors share information about the children in order to gain greater appreciation of all of the students.

The benefits of this professional collaboration have been noted consistently. Teachers have commented that the chance to observe and discuss their children is a unique and exhilarating experience. Although not every student will be identified as potentially gifted in the art form observed, participation in the activities provides the opportunities for illuminating specific strengths, problems, and learning styles. Over the course of seven weeks, the discussions become more focused and insightful as students are observed in different activities and consensus among panelists is reached.

Use of the Tally Sheet

The separate identification tally sheet is filled out independently by every panelist for each identification class observed. A positive behavior noticed by a panelist is marked as a + next to the criteria. No negative marks are made and positive notices are not erased or crossed out. The marks are tallied by totalling the number of observers who noticed the child in each category. The individual tallies are then transferred to a Student Identification Sheet which contains the marks for all seven weeks.

In addition to the tallies each child is given an overall rating (1=definite selection, 2=possible selection, 3=not selected) at the end of each class. This rating refers to the child's performance in that particular class only and is used in concert with other information to determine the child's ultimate selection for advanced training.

Identification Criteria

The aim of the identification criteria is to help focus the observers on common attributes and behaviors. It provides language for their instinctive observations. When observing a whole class of students it is not possible to give a fair numerical rating for each child on multiple criteria, so the categories (See Figures 1 and 2) provide a structure for noticing outstanding moments. An overall impression is formed from observing the students actively engaged in the actual activities that will make up the advanced training program.

The ten items on the checklist developed for dance and the eight items for music fall into three categories: skills, motivation, and creativity. In order to encompass as many student behaviors as possible, each of the criteria is defined by four or five behavioral examples. These behaviors are not mutually exclusive. They overlap and are seen in different combinations in each person.

The overall rating allows a summative, personal reaction of the panelist. A child who may be noticed in only one or two categories may be so outstanding in those areas as to warrant selection. For instance, a child who has not yet developed much coordination or rhythmic sense may move with such abandon and improvisational originality as to warrant selection. Simple numerical totals cannot account for this outstanding potential.

Final selection for advanced training relies on both the quantitative ratings and the overall qualitative impression. Taken together they form a prediction that a child's abilities and motivation will allow the talent potential to emerge through further training in the art form.

Preliminary Results of the Research

Some of the questions guiding the research on the outcomes of Talent Beyond Words are follows:

1. How reliable and valid is the identification process?
2. Can teachers identify potential talent in dance and music in their students?
3. What are the best predictors of talent in dance and music?

4. How does the identification and development of student potential in dance and music affect students?

To measure the effectiveness of the project in regard to these questions a quasi-experimental design was chosen. The design uses repeated measures to assess formative as well as summative effects. Students and teachers from four schools are participating in the study. Two experimental schools participate in the identification and talent development in either dance or music. Two control schools matched to the experimental schools by economic and size considerations only participate in the talent identification process.

The first year of the project served as a pilot study. Much of the early information involved the experimental schools only and provided some formative data useful in planning for years two and three.

The major emphasis in year one has been to develop a reliable and valid process by which students from disadvantaged or at risk populations could be screened for potential in dance or music. It was hoped that such a process would not have to rely solely on artist input, but that teachers and non-arts professionals could be trained to notice potential talent in dance and music in their students. Fifteen third grade classes in the two schools (396 children) have participated in the identification process. Four core groups, a total of 92 students (23%) were selected. The identified groups fit the target profile of primarily minority (93%), bilingual (25%), special education (11%) and academically challenged children who would not normally be selected by traditional measures for other gifted programs based on their academic performance.

Preliminary analysis of each panelist's tally sheet for the first year of identification determined that agreement was very high among artists and classroom teachers after 4 weeks of classes (.65 interrater reliability) and that artists and non-artists were able to recognize the same abilities in students.

To complete a profile on the participating students, information was collected on student achievement, self-concept, ethnic group, grade and sex, teacher talent awareness, and audition scores. Student achievement data consisted of national percentile scores in math and reading, as measured by the Iowa Test of Basic Skills, administered annually by the school district. To estimate student self-esteem the Piers Harris Self-Concept Scale was administered to the students. In addition to an overall self-concept score, 6 subtest scores were obtained: behavior, intellectual and social status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction. Demographic information was obtained from school records and includes, age, sex, and ethnic group.

After the second round of field testing we are satisfied that the process and instrumentation is fair, easy to use, and adaptable for use in a variety of environments. Final reliability and validity data on the identification process will be available in the summer of 1992. Data on the impact of the program on students and teachers will be ready for publication after the end of the project in 1993.

OTHER PROGRAM COMPONENTS

Teacher Training

Classroom teachers play a central role in Talent Beyond Words. They are active participants in the talent identification process, co-researchers in the collection of data, and collaborators in the development of curriculum to help develop the talents and interests of their students. The teacher training component of Talent Beyond Words includes yearly week-long summer institutes and four weekend workshops during each school year. Teachers in grades 2-6, administrators, and specialists including special education, bilingual, arts, gifted, physical education participate in workshops, meetings, and observations during the year in order to follow the progress of students in the program. The **program goals** for teachers are:

- To increase teachers' understanding and appreciation of the arts;
- To sharpen the teachers' ability to recognize artistic abilities in their students and in themselves;
- To demonstrate the potential of the various arts to develop learning skills, confidence and discipline;
- To inspire creative, interactive, and cooperative teaching methods in the classroom.

Components of the teacher training process include instruction in music and dance techniques, group work in special skill areas including improvisation, creative movement, choreography, recorder, percussion, and voice. Discussion and analysis of professional performances, arts in education literature, and the participatory arts experiences leads to the development of the arts-related curriculum.

The high level of understanding and recognition that teachers have displayed for the artistic abilities of their students has been a key factor in the rapid progress of the students in training. This appreciation is one of the most valuable long term outcomes of Talent Beyond Words in these two schools.

Parent/Family Involvement

A large majority of the students in the core talent group are from single parent households or live with family members other than parents. In recognizing the challenges faced by parents who work, who have other children to care for, and who have little or no discretionary income, the program has created a support structure to help parents become involved in their child's artistic training. A bilingual liaison, on the ArtsConnection staff, informs other parents of their child's progress or problems in the program at convenient times for the parents.

Weekend events designed specifically for Talent Beyond Words bring family members into the school and to local arts institutions and theaters, and introduce families to educational and professional opportunities that exist for their talented children. Free or low priced tickets are made available to them for performances around the city. Also, trips are organized to such cultural centers as the Brooklyn Academy of Music, Lincoln Center, and Broadway theaters.

Dissemination and Replication

The methods used in the identification process and the training curriculum were designed to be transferrable to other settings, as well as adaptable to a variety of artistic styles and techniques. While visits by professional performing groups, instructors and performers from diverse ethnic groups and cultures and in-service training at cultural institutions are some program adaptations which may be more available in urban than rural settings, the use of video tape, touring arts companies and field trips to nearby cities are acceptable substitutes.

The key partnership is between the school administration and the arts agency or instructors. There must be careful planning and scheduling of the program, and clear agreement on the goals and objectives. The school administration must communicate the value of the program to the faculty and parents. Artist instructors who are chosen must be able to design their curriculum around the special needs of the school being both flexible and knowledgeable of the population served.

The specific needs of the arts program are:

- An appropriate space to work in during and after school

- A principal with a belief in the arts as part of the school program
- A strong commitment on the part of the school to helping its artistically gifted students who may be struggling academically

Many schools already have some of the components that Talent Beyond Words offers, such as a performance series, a music or dance teacher or teacher training workshops in the arts. It is highly preferable that the use of outside resources support the existing school programs and that the arts program be connected to the school's instructional plan in a comprehensive and coherent way.

In this model, the arts program is a basic part of the school day. It can also be part of after school activities, but not as a "frill" or a reward. It is not surprising that a majority of students identified through our process are performing poorly on standardized tests and may get into trouble in school. It is precisely the combination of traits which are considered strengths in the performing arts, including creative and expressive facility, high energy and physical ability, and strong interests in non-academic areas that put these students at-risk of failure and eventually dropping out of school. Therefore, it is vital that the arts component be a part of the regular instructional program. The arts can be a powerful hook to engage, motivate, and teach some of the most talented and challenging students in the school.

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The Twice-Exceptional Child Project:

Identifying and Serving Gifted/Handicapped Learners

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Abstract

The University of New Mexico's Twice-Exceptional Child Project was designed to identify and serve elementary and middle school aged gifted children with learning problems. To address the unique needs of gifted-handicapped students, school and university educators involved in the collaborative project have produced a model to screen and identify gifted/handicapped students. In addition to a description of assessment measures implemented in this New Mexico program, this chapter includes an overview of the creation of both school-based programs and differentiated curricula for educating learners with both gifted potential and problems with learning, behavior and/or communication which characterize them as twice-exceptional.

OVERVIEW OF THE PROJECT

In 1988, James Gallagher identified national priorities associated with gifted learners. One of those priorities was the need for our nation's schools to provide more appropriate educational opportunities for gifted underserved populations. Students with learning or behavioral difficulties are among those historically under-represented in gifted programs.

> It is now becoming more and more apparent that there are a number of children with special intellectual-processing problems [i.e., those with learning, communication, and/or behavioral disabilities], that nevertheless, maintain an extraordinarily high general intellectual potential. The question, then, is how does one educate those twice-exceptional children where adaptations are required in their educational situation? (Gallagher, 1988, p. 110)

In recent years other professionals in the fields of gifted education and special education also have challenged educators to identify and serve gifted children with learning problems more effectively (Barton & Starnes, 1989; Fox, 1984; Jenkins-Friedman, 1987; Vail, 1987; Whitmore, 1989; Whitmore & Maker, 1985). The University of New Mexico's **Twice-Exceptional Child Project** is a response to that challenge.

The project is designed to screen, identify, and provide unique educational services to gifted students with mild-to-moderate handicapping conditions (excluding physical and/or sensory impairments). Specifically, the project serves elementary and middle school students who have a learning disability, communication disorder, or behavior disorder, and who also are gifted or potentially gifted. The students targeted for the project attend public or private schools in Albuquerque and Los Lunas, New Mexico.

Six evolving goals have directed this grant from the U. S. Department of Education. Those goals are:

1. To develop, test, and implement a model for identifying twice-exceptional students (i.e., gifted children with learning, behavior, and/or communication problems);
2. To develop school-based programs/classes for identified twice-exceptional students;
3. To develop, test, and implement differentiated curricula and instructional strategies (including the use of interventions directed through technology) for educating twice-exceptional students;
4. To provide special services to twice-exceptional students and their families to assist in meeting their unique social and emotional needs;
5. To provide training and support to teachers of twice-exceptional students; and
6. To disseminate project outcomes at local, state, and national levels.

A major task of this project has been to develop and test a model for the identification of gifted/handicapped students. The identification model, its selection criteria, and its suggested assessment measures are specific enough to meet the needs of a large, multicultural, urban school system, yet flexible enough to be used by rural school districts.

An additional task of the project has been to assist participating school districts in the development of special classes for twice-exceptional students. The students in these classes are supported by: a project coordinator; trained teachers; specially developed materials; and a special technology-based curriculum, individualized to address each student's particular learning styles, modality preferences, strengths, deficits, and interests. Teachers of the identified children have received extensive training through university classes and from national and regional experts. The families of these students have been provided with support groups and small group counseling services. Those students with unique emotional needs have been provided individual and small group counseling. Finally, project information has been presented locally to: public school administrators, special education diagnosticians, special education "methods and materials" coordinators, special education "lead teachers," special education parent/teacher groups, and gifted education parent/teacher groups. The project also has been presented at numerous state and national conferences.

CONTEXT OF THE PROJECT

In an effort to design an identification and programming model which could be replicated in a variety of settings, this University of New Mexico project was implemented in three small private schools and two diverse public school systems: the Albuquerque Public School System, which is the 27th largest school system in the nation, and the Los Lunas Public School System, which serves a rural community whose school population is less than 6,000.

Twelve self-contained classes, each serving a maximum of fifteen students, were established during the first year of the project. The positive response of parents, administrators, teachers, and children in the public school classes allowed the project to expand the second year through the creation of five additional classes. However, the private schools decided that it was not in their best interest to "label" any of their students as "special needs" children, and, therefore, withdrew.

The identification model that was developed, pilot tested, and revised as needed during the first year of the project (1990-91) serves as the "gatekeeper" of the project. Referred students are not automatically placed in one of the self-contained classes for twice-exceptional children. Rather, placement decisions are based on a set of identification criteria and on documentation of the student's need for an alternative educational program. Between the spring of 1990 and December of 1991, 382 students were referred to the project. Of those referred students, 315 students (83%) met project identification criteria. Seventy-three percent of these identified students were placed in one of the special classes.

POPULATION SERVED BY THE PROJECT

The Twice-Exceptional Child Project serves identified children who have demonstrated high ability, outstanding critical thinking skills, or unusual creative ability but who also have a learning disability (approximately 85% of the project's student population), a behavior disorder (approximately 10%), or a communication disorder (approximately 5%). The project serves twice-exceptional children in grades one through eight. As is typical of the learning disabled/behaviorally disordered populations in general, the vast majority of students identified for the project are males (86%). The ethnic diversity of identified students is higher than that typically found in gifted programs. Seventy percent of the project students are Anglo-Americans, 21% are Hispanic-Americans, 2% African-Americans, 1% American Indians, 5% come from bi-racial families (predominantly Hispanic/Anglo Americans), and 1% come from other ethnically diverse backgrounds.

IDENTIFICATION COMPONENT OF THE PROGRAM

The identification of twice-exceptional students within this project has been achieved using a multifaceted process involving five steps: (a) preplanning discussions and activities; (b) awareness training; (c) establishment of the referral-to-placement procedures; (d) creation of a district level screening committee; and (e) implementation and refinement of the referral-to-placement procedures. This process has been utilized to the fullest extent within the large, structurally complex, urban school district. The rural and private schools, because of their small size, were able to use a simplified version of the process. The five steps of the identification model are discussed in the following section.

Step 1: Preplanning

Within the first months of the project, an Identification Planning and Coordinating Team (IPC Team) was established. The team was comprised of project personnel, university special education/gifted education faculty members, and public school special education/gifted education administrators. The team's purpose was to develop, coordinate, implement, monitor, evaluate, and revise all identification procedures for the project. Early in the preplanning stage, the IPC Team addressed the following three major questions: (a) What criteria will the project use to define and identify twice-exceptional children? (b) How closely will those criteria parallel the New Mexico State Department of Education's definitions of gifted, learning disabled, behavior disordered, and communication disordered? and (c) How will the Twice-Exceptional Child Project's identification procedures interface with the school systems' existing procedures for identifying other special education/gifted education children?

Definitions and Identification Criteria. The following definition of a twice-exceptional child was established by the IPC Team and used throughout the project's duration.

> A Twice-Exceptional Child is a child who is gifted or potentially gifted and who has a mild-to-moderate learning disability (LD), behavior disorder (BD), or communication disorder other than articulation (CD).

More specifically, to facilitate identification of twice-exceptional children, the IPC Team determined that a child must meet the following three minimum criteria in order to be considered as twice-exceptional and to be eligible for service within the project:

1. Have an identified mild-to-moderate learning disability, or behavior disorder, or communication disorder (other than articulation) based on New Mexico's State Special Education Guidelines; and
2. Have a measured intelligence score of 120 or above; and
3. Have demonstrated giftedness through any one of the following methods:
    - Score at or above 130 on an individualized measure of intelligence; or
    - Score within the gifted range (i.e., 95th percentile or above) on a standardized achievement test; or
    - Score within the gifted range (i.e., 95th percentile or above) on a standardized critical thinking test; or
    - Score within the gifted range (i.e., 95th percentile or above) on a standardized creativity test.

In addition to meeting the above minimum criteria, students placed in one of the fourteen self-contained classes generally had participated in other types of special education programs including gifted resource classes. These interventions were often unsuccessful in addressing students' complex educational needs, and failed to alleviate discrepancies between abilities and intelligence scores.

The IPC Team decided that the project's specific definitions and identification criteria would parallel, in virtually all aspects, those currently being used for the identification of special education/gifted education children based on New Mexico State Educational Standards (NM State Department of Education, 1990). The existing definition of gifted within New Mexico's State Educational Standards requires a child to score 130 or above on an individually administered intelligence test and also to score in the gifted range on an achievement, critical thinking, or creativity test. In recognition that learning/behavior problems were likely to depress students' scores on standardized intelligence and achievement tests, the project created its own category called "potentially gifted," rather than try to change this statewide criteria for gifted.

Any children who met the New Mexico's state criteria for giftedness and also met the project's identification criteria were considered to be gifted/handicapped, while those who met the project's identification criteria but did not meet the state's gifted criteria were considered to be potentially gifted/handicapped. The gifted/handicapped students and the potentially-gifted/handicapped students were labeled as twice-exceptional and were eligible for possible placement within the project's self-contained classes.

Interface with Special Education. New Mexico's broad special education identification procedures follow federal guidelines and involve four levels: (a) the referral level, (b) the school-based intervention and screening level, (c) the diagnostic evaluation level, and (d) the placement level. Within these established identification procedures, personnel and committees associated with the Twice-Exceptional Child Project serve as consultants to the system. The school system solicits input from the project whenever it appears that a child referred to, screened by, or evaluated within the broader special education system might be twice-exceptional.

The IPC Team designed the Twice-Exceptional Child Project's identification model so that it could be absorbed into the much larger identification procedures for all New Mexico special education students. Figure 1 illustrates the various levels of New Mexico's Special Education Identification Procedures and how the Twice-Exceptional Child Project functions within each level.

Figure 1

The Role of the Twice-Exceptional Child Project within New Mexico's Special Education Identification Process

Referral Level ↓	A child is referred to Special Education as possibly in need of services from special education	**Twice-Exceptional Child Project's Role at this Level:** • Encourages parents who call the project to contact the Sp. Ed. teacher at their child's school to discuss the appropriateness of referring the child to the project. • Provides awareness training for Sp. Ed. teachers so those teachers can better determine which children might be twice-exceptional and thus might benefit from being referred to the project.
School-Based Intervention and Screen Level ↓	School personnel discuss children referred to Special Education and recommend various types of classroom interventions which might help the child. If the recommended interventions are not successful, the school begins screening procedures to see if the child qualifies for Special Education services.	**Twice-Exceptional Child Project's Role at this Level:** • Accepts referrals from schools to the twice-exceptional project after the school has contacted its Regional Sp. Ed. Coordinator regarding the appropriateness of the referral.
Diagnostic Evaluation Level ↓	Special Education certified diagnosticians evaluate the child to determine eligibility for Special Education services.	**Twice-Exceptional Child Project's Role at this Level:** • Accepts program referrals from diagnosticians after they have discussed such a referral with the appropriate Regional Sp. Ed. Coordinator. • Offers the services of the project's diagnostician to conduct supplemental testing on a referred child.
Program Placement Level	Multi-disciplinary team conducts an Educational Assessment and Review Meeting (EA&R) to determine the most appropriate placement for the child.	**Twice-Exceptional Child Project's Role at this Level:** • Conducts district-wide Twice-Exceptional screening meetings to discuss children referred to the project. • Makes recommendation that is given to the child's EA&R committee about whether or not the child qualifies for and might benefit from placement in the Twice-Exceptional class. • Attends EA&R meetings when invited.

By structuring the project's identification component as described above, the model readily became part of the school districts' existing special education system rather than functioning as an isolated, separate approach. The intention behind this approach was to ensure that the public school twice-exceptional students within this project would be eligible for special education funding and services. This made it possible for the students to continue receiving special services even after the project's Jacob K. Javits federal funding ended.

To better allow the project's identification procedures to be fully assimilated into the school systems' existing policies, New Mexico state guidelines regarding the type of standardized instruments used to identify students as gifted, learning disabled, communication disordered, or behavior disordered were closely followed. Therefore, new assessment instruments were not developed; instead, the school districts' diagnosticians were encouraged to expand their use of existing instruments (e.g., the Torrance Tests of Creative Thinking or the Test of Concept Utilization) to seek areas of giftedness among special education populations. Examples of typical standardized tests and measures used by diagnosticians to help identify gifted/handicapped students include, but are not limited to: WISC-R Intelligence Test, Woodcock Johnson Achievement Test Battery, Burks Behavioral Rating Scales, Visual Motor Integration Test, Wepman Test of Visual Processing, and SOI subtests for critical and creative thinking.

Step 2: Awareness Training

The second step in the identification process was to provide awareness training. It was critical that information be disseminated to key school personnel regarding: (a) the characteristics of twice-exceptional children, (b) the project's definition of a twice-exceptional child, and (c) the types of programs being planned for these children. This information would help these professionals to begin referring children who demonstrated characteristics of twice-exceptional children, or who might fit the project's definition, or who might benefit from the project's intervention programs.

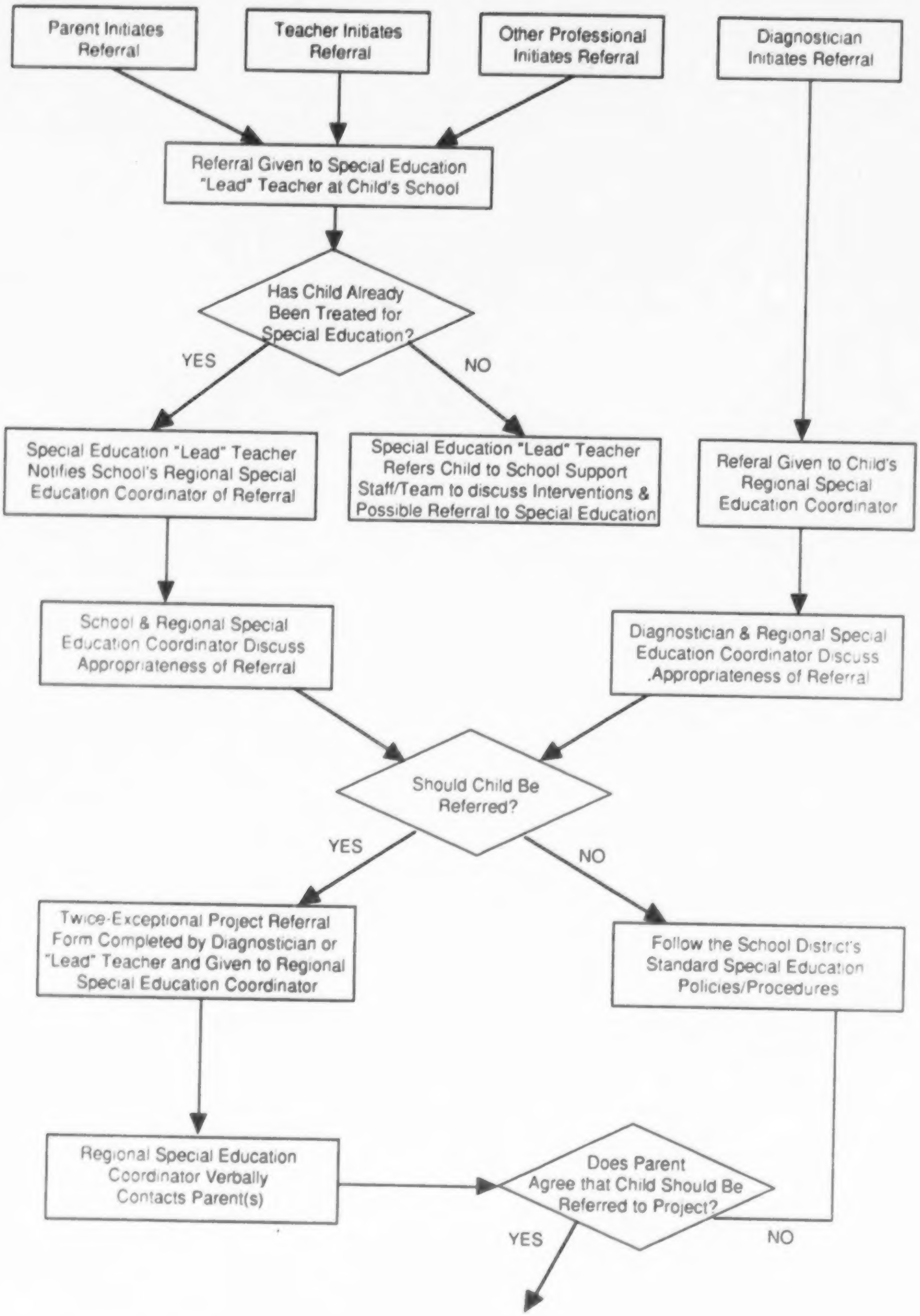
Awareness information first was disseminated to key special education administrators (i.e., directors of special education, special education regional coordinators, and special education regional diagnostic coordinators) who then paved the way for further dissemination to other appropriate professionals. Separate awareness training sessions were held at each of the school system's four regional offices. Regional diagnosticians in the Albuquerque Public School System, special education coordinators, special education methods-and-materials teachers, and special education lead teachers were invited to attend the training sessions. We are convinced that the positive reception of the Twice-Exceptional Child Project among school personnel and parents alike is due in great measure to the strong support from the system's special education central administration. That support has been positive, forthright, and consistent.

Step 3: Referral-to-Placement Procedures

The third step in the process of identification was the establishment of referral-to-placement procedures. Figure 2 presents the Twice-Exceptional Child Project's Referral-to-Placement Procedures in the form of a flow chart. These procedures were developed by the project's IPCTeam with input from the previously mentioned key special education administrators and diagnosticians.

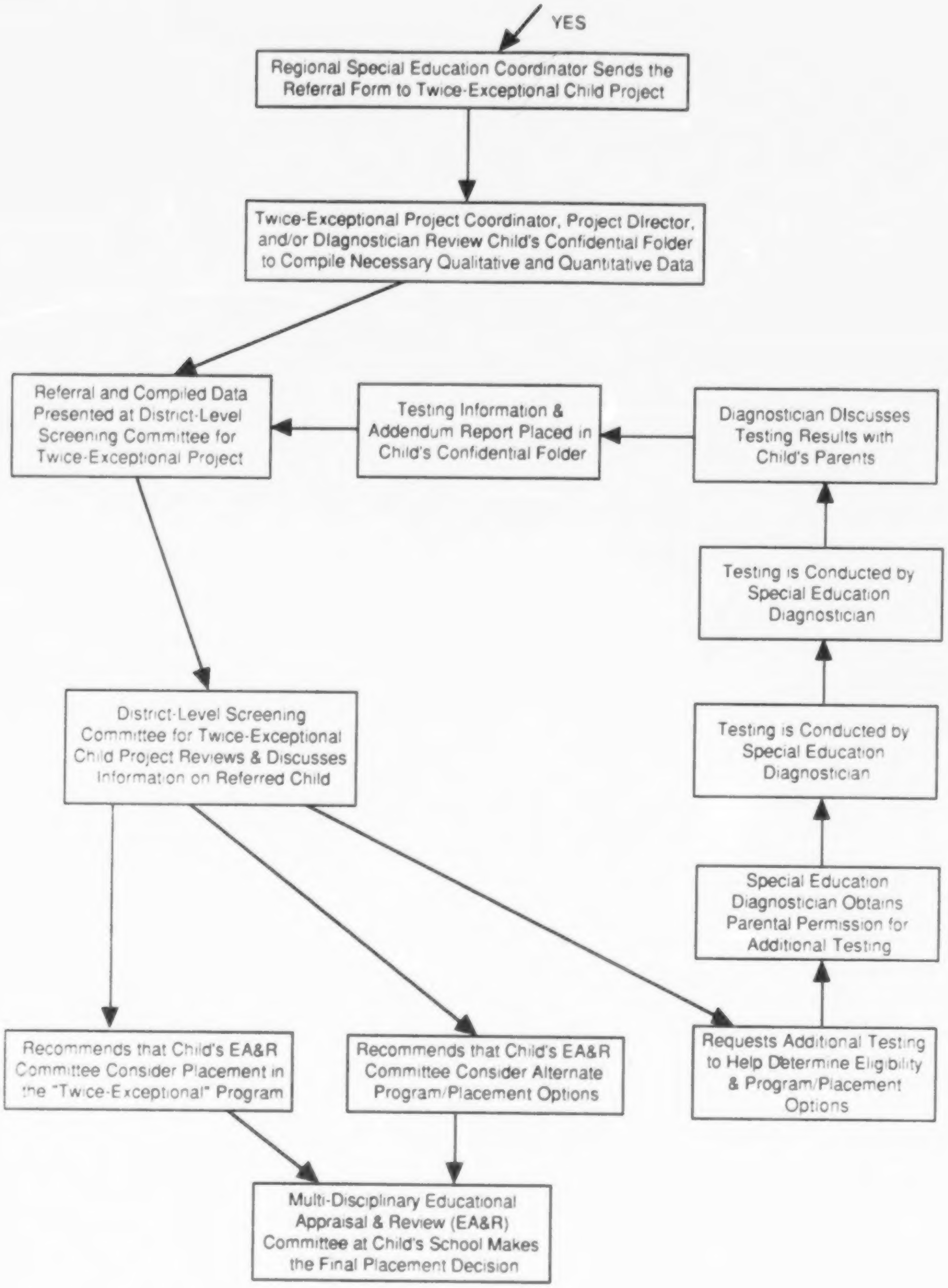
Figure 2

Twice-Exceptional Child Project's Referral to Placement Procedures



Parent Initiates Referral
Teacher Initiates Referral
Other Professional Initiates Referral
Diagnostician Initiates Referral
Referral Given to Special Education "Lead" Teacher at Child's School
Has Child Already Been Treated for Special Education?
YES
NO
Special Education "Lead" Teacher Notifies School's Regional Special Education Coordinator of Referral
Special Education "Lead" Teacher Refers Child to School Support Staff/Team to discuss Interventions & Possible Referral to Special Education
Referal Given to Child's Regional Special Education Coordinator
School & Regional Special Education Coordinator Discuss Appropriateness of Referral
Diagnostician & Regional Special Education Coordinator Discuss .Appropriateness of Referral
Should Child Be Referred?
YES
NO
Twice-Exceptional Project Referral Form Completed by Diagnostician or "Lead" Teacher and Given to Regional Special Education Coordinator
Follow the School District's Standard Special Education Policies/Procedures
Regional Special Education Coordinator Verbally Contacts Parent(s)
Does Parent Agree that Child Should Be Referred to Project?
YES
NO

Figure 2 continued


YES
Regional Special Education Coordinator Sends the Referral Form to Twice-Exceptional Child Project
Twice-Exceptional Project Coordinator, Project Director, and/or Diagnostician Review Child's Confidential Folder to Compile Necessary Qualitative and Quantitative Data
Referral and Compiled Data Presented at District-Level Screening Committee for Twice-Exceptional Project
Testing Information & Addendum Report Placed in Child's Confidential Folder
Diagnostician Discusses Testing Results with Child's Parents
Testing is Conducted by Special Education Diagnostician
Testing is Conducted by Special Education Diagnostician
District-Level Screening Committee for Twice-Exceptional Child Project Reviews & Discusses Information on Referred Child
Special Education Diagnostician Obtains Parental Permission for Additional Testing
Recommends that Child's EA&R Committee Consider Placement in the "Twice-Exceptional" Program
Recommends that Child's EA&R Committee Consider Alternate Program/Placement Options
Requests Additional Testing to Help Determine Eligibility & Program/Placement Options
Multi-Disciplinary Educational Appraisal & Review (EA&R) Committee at Child's School Makes the Final Placement Decision

The procedures encompass the referral, the screening, and the placement of twice-exceptional children. In most cases, an initial referral is made from a child's home school or from a diagnostician. The referral then progresses through the special education system until it reaches the coordinator of the Twice-Exceptional Child Project. The coordinator reviews the child's case history and, with the child's regional special education coordinator, presents the referral to the Twice-Exceptional Child District Screening Committee.

Step 4: District Level Screening Committee

The fourth step in the identification process was to establish a District Level Twice-Exceptional Child Screening Committee. The function of this district wide screening committee is to serve as a gatekeeper to ensure continuity across the district in the identification of twice-exceptional children and placement of children in the newly created classes.

The committee is comprised of professionals from the school system (i.e., the Special Education Administrative Assistant and a special education coordinator from each of the district's four regional offices) and from the project (i.e., the Project Director and the Project Coordinator). These permanent committee members attend regularly scheduled, bi-monthly screening meetings. Over time these members developed a detailed understanding of the nature and needs of twice-exceptional children and of the types of educational interventions available through the district's programs. In addition to the committee's permanent members, diagnosticians and other professionals knowledgeable about the referred children are invited to attend the screening meetings. These persons provide the committee with vital qualitative information unavailable from reviews of confidential records. Also, if a referred child is being considered for placement in a particular twice-exceptional class, the teacher of the class is invited to attend the screening meeting.

For each referred child, the screening committee seeks information regarding: (a) evidence of giftedness; (b) nature and extent of the handicapping condition; and (c) current achievement levels in order to determine whether the child meets the project's previously defined minimum identification criteria. This information is obtained by reviewing the initial referral form, diagnostic data on the child, and information from confidential file folders. Additional information is obtained through verbal input from the child's teacher, school, or other persons aware of the child's background and needs.

The committee then considers whether or not the child has demonstrated a need for placement in one of the special classes. To do this, the committee seeks further evidence: (a) that the student is at-risk emotionally and/or academically (e.g., has a low self-concept or is underachieving); (b) that previous special education interventions and program placements have been tried without success; and (c) that the child's unique combination of exceptionalities requires special programming beyond that which could be provided within more typical special education classes. If there is not enough information to make an eligibility decision or placement recommendation, the screening committee requests that additional testing be performed and that the child be presented again at a future committee meeting.

After reviewing all information about a child, the Twice-Exceptional Child Screening Committee makes a recommendation that is given to the Education Appraisal and Review Committee (EA&R), a multidisciplinary team that includes the child's parent(s). The Twice-Exceptional Child Screening Committee may recommend that the child be placed in one of the project's special classes or it may recommend that the child's home school provide an alternative special education intervention for the child (e.g., the child might participate in the school's pull-out gifted program and in its resource room special education program). All final placement decisions are made by the EA&R Committee at the child's home school. Most often those decisions follow the screening committee's recommendations.

Step 5: Implementation and Refinement

The final step in the project's multifaceted identification model is the implementation and refinement of the process. Initial, large scale screening was conducted during the summer 1990. Since the special classes were to begin that fall, it was vital that screening and placement decisions be made as quickly as possible. Fortunately, the screening process needed little modification; and so, by the start of the 1990/91 school year over 200 children had been screened for the Twice-Exceptional Child Project. During the second year of the project, the identification process was used to screen an additional 180 students.

IDENTIFICATION RESULTS

During the project's two year duration, 382 students were referred for screening and possible program placement. Forty-seven students (12.3%) did not meet the project's minimum identification criteria. Fifteen (3.9%) needed more testing before a screening and placement decision could be made. This additional testing was in progress at the time of this report. Five students moved out of district prior to a final screening decision being made. Thus, 315 (83%) of the referred students did meet the project's identification criteria and were designated as twice-exceptional. This is a remarkably high rate of accurate referrals.

Figure 3 delineates data regarding those students who were designated as twice-exceptional. The figure presents information regarding: placement decisions, gender and ethnicity, and the combination of exceptionalities which these twice-exceptional children possess. It is interesting to note that 63 of these students (20%) actually were characterized as being exceptional in three or more areas (one of which was gifted or potentially gifted).

Figure 3

1990-1992 Twice-Exceptional Child Project: Data Regarding All Identified Twice-Exceptional Students

315 Students screened for the Twice-Exceptional Child Project met the established Identification Criteria and thus were considered as Twice-Exceptional.

233 (74%)	Identified twice-exceptional students were from the Urban (Albuquerque) Public School District.
35 (11%)	Identified twice-exceptional students were from the Rural (Los Lunas) Public School District.
47 (15%)	Identified twice-exceptional students were from the three private schools.

231 (73%)	Were identified and placed in a twice-exceptional class: Year 1: 161 students were served in 13 twice-exceptional classes; Year 2: 149 students were served in 14 twice-exceptional classes (i.e., 78 students returned for a 2nd year in the twice-exceptional program and 71 students were new to twice-exceptional programming).
27 (9%)	Were identified but the E.A.&R. committee and/or family declined placement in one of the twice-exceptional classes.
19 (6%)	Were identified but the screening committee felt the students' special needs could best be met in the home school rather than in a twice-exceptional class.
8 (3%)	Were identified but, since these students had not previously received special education service, the screening committee felt they should try a less restrictive environment for special education service than would be provided in a self-contained twice-exceptional classroom.
12 (4%)	Were identified but the students' learning/behavior problems were too severe to be successfully addressed in a twice-exceptional class.
9 (3%)	Were identified but the students were too old or too young to be served by a twice-exceptional class.
9 (3%)	Were identified but, based on screening date, the committee recommended that placement in a twice-exceptional class not occur until the following school year.

274 (86%) Males
41 (13%) Females

220 (70%) Anglo
95 (30%) Minority
65 (21%) Hispanic
4 (1%) Amer.Indian
5 (2%) Africa Amer.
3 (1%) Other minority
13 (4%) Biracial-Hisp./Anglo
3 (1%) Biracial-Af.Am./Anglo
1 (.3%) Biracial-Am.Indian/Anglo
1 (.3%) Biracial-Hisp./Am.Indian

Exceptionalities of Students Eligible for Twice-Exceptional Program

127 (40%)	LD & GT	66 (21%)	LD & Potentially GT
19 (6%)	BD & GT	7 (2%)	BD & Potentially GT
5 (2%)	CD & GT	1 (.3%)	CD & Potentially GT
18 (6%)	LD & CD & GT	19 (6%)	LD & CD & Potentially GT
11 (4%)	LD & BD & GT	11 (4%)	LD & BD & Potentially GT
3 (1%)	BD & CD & GT	1 (.3%)	LD & CD & BD & Potentially GT
27 (9%)	Exceptionality data are unavailable; however, the school determined that the child did not meet criteria as twice-exceptional.		

Table 1 presents the intelligence and achievement scores for 362 or the 382 students that were referred to the Twice-Exceptional Child Project. The intelligence scores reported in this table are those obtained on the WISC-R; the achievement scores are those obtained on the Woodcock-Johnson Cognitive Achievement Test Battery and are reported as standard scores. The majority of students referred to the project had been tested using these particular instruments.

Table 1 divides students referred to the project into two major categories: (a) identified twice-exceptional students (i.e., the 315 students who did meet the project's identification criteria) and (b) non-qualified students (i.e., the 47 students who did not meet this criteria). To clarify the strengths and deficits of the 315 identified students, Table 1 divides these students into the following subgroups: (a1) the 33 twice-exceptional students whose highest test score was the one received on the WISC-R Full Scale score; (a2) the 84 twice-exceptional students whose highest test score was their WISC-R Verbal score; and (a3) the 137 twice-exceptional students whose highest test score was the WISC-R Performance score. Data on the 20 referred students who were still in the testing process or who had moved prior to screening are not included in Table 1.

IMPLICATION REGARDING TWICE-EXCEPTIONAL INCIDENT RATE

The large number of students identified by the project as twice-exceptional has implications for other school districts, for teachers of the gifted and of handicapped children, and for school psychologists or diagnosticians. Gifted/handicapped children have been referred to as a low incident population, a group whose numbers are few, or a group whose numbers are unknown (Gunderson, Maesch, & Rees, 1987; Whitmore, 1989; Sah & Borland, 1989). However, the Twice-Exceptional Child Project found a different pattern. As reported below, the incident rate of twice-exceptional children in this project ranged from 2% to 7% of their school districts' special education population.

Table 1
Intelligence Quotients and Academic Achievement Scores for Students Referred to the Twice-Exceptional Child Project

	Identified Twice-Exceptional Students - (n=315)	Identified Twice-Exceptional Students Whose Full Scale I.Q. Was Highest Score (n=33)	Identified Twice-Exceptional Students Whose Verbal I.Q. Was Highest Score (n=84)	Identified Twice-Exceptional Students Whose Performance I.Q. Was Highest Score (n=137)	Referred Students Who Did Not Meet Identification Criteria (n=47)
WISC-R Full Scale I.Q. Score	n = 254 X = 122.97 SD = 9.67 (92-149)	n = 33 X = 132.52 SD = 6.83 (118-145)	n = 84 X = 122.80 SD = 9.45 (92-149)	n = 137 X = 120.77 SD = 9.04 (95-140)	n = 36 X = 113.97 SD = 12.91 (84-142)
WISC-R Verbal I.Q. Score	n = 254 X = 117.90 SD = 15.05 (70-155)	n = 33 X = 128.42 SD = 6.98 (113-143)	n = 84 X = 130.05 SD = 10.55 (85-155)	n = 137 X = 107.90 SD = 11.10 (70-131)	n = 36 X = 112.97 SD = 16.19 (87-149)
WISC-R Performance I.Q. Score	n = 254 X = 123.61 SD = 12.62 (80-147)	n = 33 X = 129.06 SD = 6.87 (115-145)	n = 84 X = 110.00 SD = 10.99 (80-137)	n = 137 X = 103.64 SD = 6.32 (115-147)	n = 36 X = 112.25 SD = 12.25 (84-131)
Highest WISC-R I.Q. Score	n = 254 X = 130.86 SD = 7.50 (106-155)	See WISC-R Full Scale I.Q. Cell	See WISC-R Verbal I.Q. Cell	See WISC-R Performance I.Q. Cell	n = 36 X = 120.56 SD = 12.55 (87-149)
Woodcock-Johnson Reading Achievement	n = 216 X = 97.03 SD = 17.22 (49-142)	n = 28 X = 102.36 SD = 15.97 (71-135)	n = 66 X = 104.55 SD = 17.84 (72-142)	n = 115 X = 91.16 SD = 14.96 (49-128)	n = 29 X = 101.00 SD - 17.36 (74-134)
Woodcock-Johnson Mathematics Achievement	n = 215 X = 107.06 SD = 14.87 (72-146)	n = 28 X = 114.46 SD = 12.32 (84-135)	n = 66 X = 109.52 SD = 15.66 (73-136)	n = 114 X = 103.93 SD = 14.13 (72-146)	n = 29 X = 107.45 SD = 15.09 (81-154)
Woodcock-Johnson Written Language Achievement	n = 207 X = 92.89 SD = 15.01 (56-135)	n = 28 X = 98.96 SD = 14.51 (75-128)	n = 62 X = 97.19 SD = 16.50 (65-131)	n = 110 X = 88.51 SD = 11.93 (56-118)	n = 29 X = 96.28 SD = 15.87 (69-126)

Note:
Numbers in parentheses are the range of scores within each cell.

The incident rate of twice-exceptional students in the project's two public school systems was calculated in the following way. The number of identified twice-exceptional students from each district was compared to its respective special education child count data.

The urban public school district's December, 1991, total student population was 86,549. The district's learning disabled (LD) population was 6,097, behaviorally disordered (BD) population was 1,247, and communication disordered (CD) population was 4,336. Thus, its total LD, BD, and CD population was 11,680 students. Of those students, 224 (.019) met criteria for twice-exceptional, making the incident rate of twice-exceptional students within the urban district approximately 2% of its learning disabled, behavioral disordered, and communication disordered students.

The rural school district's December, 1991, total student population was 5,989 with a special education population (excluding gifted/talented) of 683 students. The district's LD population was 283, BD population was 73, and CD population was 137 (total LD, BD, & CD = 493). Of those 493 students, 35 (7%) were twice-exceptional according to the project's criteria.

To provide a more extensive picture of the incident rate of twice-exceptional students, information from the urban school district's extensive special education data bank was employed. That data bank stores diagnostic information on 30,028 children referred to special education since 1985. Across those records, 370 students were diagnosed as gifted and learning disabled; 17 were gifted and communication disordered; and 50 were gifted and behavior disordered. Additionally, 498 students in the data bank were learning disabled children who did not meet New Mexico's gifted criteria but did have an intelligence score of 120 or above; 22 were communication disordered students who had an intelligence score of 120 or above but did not meet gifted criteria; and 69 students were behavior disordered with an intelligence score of 120 or above but who did not meet gifted criteria. Therefore, based on data from 30,028 referred special education children, 1049 were gifted/handicapped or potentially gifted/handicapped and likely to have been identified as twice-exceptional. This is an incident rate of 4% of the children whose special education diagnostic/referral information was recorded in the urban district's data bank.

FACTORS CONTRIBUTING TO THE SUCCESS OF THE PROJECT'S IDENTIFICATION MODEL

The following five factors were most important to the success of this project's identification process.

1. Incorporation of the Identification Model into Existing Special Education Procedures: We believe that it was essential for this new program to fit within the school districts' existing special education model. This allowed the Twice-Exceptional Child Project to become a permanent part of the special education system and made its identified twice-exceptional children eligible for state/federal special education services and funding.

2. Public School Administrative Support: When the Twice-Exceptional Child Project first began, a mentor, wise with experience, told project personnel to find someone in a high administrative position in the public school system and convince that person that twice-exceptional children should become his/her "special project." Fortunately, we were able to find two such administrators. We firmly believe that the support from these two administrators has been key to the success of this project.

3. Collaboration: The positive, collaborative working relationship between the university and both the large urban and the rural school districts allowed for positive on-going interactions, active problem solving sessions, and mutual support.

4. Awareness Training: Awareness training was provided to all concerned special education administrators and key personnel. The training was repeated on a yearly basis to inform new personnel and to update others. Input and feedback was actively sought from these groups. Thus, the project was viewed as our project rather than just another university project.

5. Acceptance into the School System: The urban and rural public schools openly embraced this project. They believed that it would provide them with ways to address the needs of children who were falling through the cracks of the special education/gifted education system. Thus, educators in these school systems quickly began referring students to the project for screening, willingly created special twice-exceptional classes, and actively recruited teachers for those classes. Much was accomplished in a remarkably short time.

Although the Twice-Exceptional Child Project's federal funding ended in December, 1991, the project continues to flourish. Both the urban and the rural school district plan to continue identifying twice-exceptional children. They also are committed to providing service to these unique children through the small, self-contained classes which were developed as part of this project.

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The Menasha Joint School District Gifted Program:

Matching Identification and Curriculum

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Abstract

Menasha Joint School District in Wisconsin implements the promising practice of matching programming to identification. Based on a broad definition of giftedness, the district employs a multiple criteria system that seeks to identify both the area and degree of giftedness in each student. Areas served include intellect, academics, creativity, leadership, and visual and performing arts. A special instrument for non-conforming students (those who attempt to hide their abilities in some way) provides assessment for students not typically nominated by teachers.

Programming in each area and at various levels is then provided based on the student's particular assessment profile. The program includes curricular, guidance, community, and co-curricular activities.

A state mandate, local policy, active administration, and positive community values provide a context that helps make this program workable. Two specific attitudes, the individual student as the program focus and an evaluative attitude toward the program, are particularly useful in keeping the program dynamic and responsive.

A RECOMMENDED PRACTICE

The literature on gifted education frequently advises those who develop gifted programs that there should be a flow from the definition of giftedness to the processes and instruments used to identify students as gifted and talented (Alvino, McDonnel, & Richert, 1981). Hoge (1988), for example, decries the lack of correspondence between official definitions of giftedness adopted by school districts and the operational definition as reflected in instruments selected to identify students as gifted.

In like manner the suggestion is made that curriculum should flow from the identification method. There should be a match between the constructs measured in the identification procedure and the program into which students are placed once identified (Cramer, 1991; Hoge, 1988). Indeed, some writers suggest that it would be even more appropriate to develop a match between a child's profile of strengths and weakness (as evidenced through his or her performance on assessment instruments and through informed professional observation) and the specific learning experiences given to that child (Birch, 1984; Treffinger, 1987). Thus, based on differences in the profiles, each child would have a different program. It is an important component of the gifted program in the schools of Menasha, Wisconsin to develop this recommended match between a child's profile and the gifted education services provided for the child.

THE SETTING

Menasha Joint School District serves approximately 3400 students. Nearby, on the borders of Lake Winnebago and the Fox River, are the cities and towns of Appleton (66,000 inhabitants), Oshkosh (60,000 inhabitants), and Neenah (26,000 inhabitants). For the Fox River area, this indicates a fairly high population density. The population in the area is primarily white (96%). The largest minority is Asian-Americans (1.8%), mostly from Southeast Asia.

While the number of school children represents only about 12% of the total population of Menasha, the median ages for the city (31.8) and town (33.0) indicate a relatively young population. Per capita income for Menasha is around $11,000 (1985 estimate). Median home prices range from $54,000 in the city to $72,000 in the town. The homes in the area are good sized, about six rooms per dwelling. Funding for the districts comes mostly from local property tax (55%), with the remainder coming predominately from the state. Few federal dollars are generated in this district. All in all, Menasha Joint School district serves a predominantly white, middle class population. It is important to keep this in mind while considering Menasha's promising practice of matching identification and curriculum.

THE PRACTICE APPLIED

The opening paragraph of the Menasha Joint School District's (MJSD, 1989) definition of giftedness begins with the following rhetorical questions:

> Should a definition of giftedness be narrow and clearly identify who is gifted, or should it be broad and only suggest who might be gifted? Should giftedness be determined by IQ scores, achievement test scores, creativity tests, teacher opinion, parental insight, peer characterization, artistic talent, athletic ability, leadership skills, grade points or self evaluation? (p. 3)

Definition

In response to these questions Menasha District's program document states:

> Although definitions of giftedness that are concise, rigid and based on limited criteria are easy to use, they also arbitrarily exclude many facets of giftedness and many

> children who do not quite fit the specific mold. Therefore, any definition of gifted children must be written to include a wide range of abilities and be based on several criteria. (MJSD, 1989, p. 3)

The document then provides the district's definition of gifted and talented, based loosely on the USOE conception (Maryland, 1971) and drawn from state standards. It states that gifted and talented students are those "who give evidence of high performance capability" (MJSD, 1989, p. 3) and lists the five areas in which this capability is recognized: (a) intellectual, (b) creative, (c) artistic, (d) leadership, and (e) specific academic.

IDENTIFICATION

The identification method provides for students to be identified specifically in one or more of the five definitional areas. This is accomplished through a multiple criteria system imbedded in a multi-level service delivery plan. The goal of the identification procedure is to determine both the area and the degree of giftedness in each pupil.

Identification Instruments

Identification tools to be used for identification in a specific area are listed on a matrix that separates the tools into three categories: (a) testing, (b) nominations, and (c) performance data (see Figure 1). Specific nomination forms, most of which are based on the Scales for Rating Behavioral Characteristics of Superior Students (Renzulli, Smith, White, Callahan, & Hartman, 1976), are used for each definitional area.

Figure 1. Identification tools matrix

IDENTIFICATION TOOLS MATRIX

AREA	TESTING		NOMINATIONS	PERFORMANCE DATA
	GROUP	INDIVIDUAL		
INTELLECTUAL	•Cognitive Abilities Test •California Test of Basic Skills •Otis-Lennon Mental Abilities Test	•Weschler Intelligence Scales for Children •Stanford-Binet Intelligence Scales	•Parents •Teachers •Peer •Self	•Grade Point Average •Project Rating
ACADEMIC		•California Achievement Tests •Metropolitan Achievement Tests •SRA Achievement Tests •Stanford Achievement Tests	•Parents •Teachers •Peer •Self	•Academic Grade •Project Rating
CREATIVITY	•Torrance Tests of Creative Thinking •GIFT, GIFFI I & II		•Parents •Teachers •Peer •Self	•Anecdotal Record •Project Rating
LEADERSHIP			•Parents •Teachers •Peer •Self	•Anecdotal Record •Activities
ARTISTIC			•Parents •Teachers •Peer •Self	•Artistic Project •Academic Grade •Anecdotal Record

In addition, two locally developed teacher scales can be employed--one a "Scale for Conforming Students," the other a "Scale for Non-conforming Students." (See Figure 2.) These instruments were developed based on reviews of the literature, expert opinion, and teacher experience. The "Scale for Conforming Students" is intended to be completed by the classroom teacher on students who clearly demonstrate their potential.

The "Scale for Non-conforming Students" serves as an assessment for those students who attempt to hide their abilities in various ways. It provides a vehicle to teachers to nominate for further assessment those students they may not readily accept as gifted because of student behavior. As stated by the coordinator, "It was a realization on the part of everyone that not everyone wants to face the challenge of being gifted, and yet, on the other hand, we felt duty-bound to try to find these youngsters and challenge them even though they don't want to be challenged."

Figure 2
Scales for conforming and non-conforming students

SCALE FOR CONFORMING STUDENTS

School ______________________ Teacher ______________________
Grades and/or Subjects Taught ______________________
Pupil's Name ______________________ Date ______________________

	Does not apply / not sure	Never	Some-times	Fre-quent-ly
1. Displays a great deal of curiosity about many things.	0	1	2	3
2. Generates and supplies ideas of solutions to problems and questions.	0	1	2	3
3. Is a high risk taker; i.e. adventurous and speculative.	0	1	2	3
4. Shows ability beyond grade level in written expression.	0	1	2	3
5. Shows evidence of independent reading for information and pleasure.	0	1	2	3
6. Has unusually advanced vocabulary for age or grade level.	0	1	2	3
7. Possesses a large storehouse of information about a variety of topics (beyond the usual interests of youngsters his/her age).	0	1	2	3
8. Has rapid insight into cause/effect relationships; tries to discover the how and the why of things; wants to know what makes things (or people) "tick."	0	1	2	3
9. Requires little direction from teachers; prefers to work independently.	0	1	2	3
10. Well liked by his/her classmates.	0	1	2	3
11. Seems to enjoy being around other people; is sociable and prefers not to be alone.	0	1	2	3
12. Participates in most activities connected with the school; can be counted on to be there if anyone is.	0	1	2	3
13. Gives very alert, rapid answers.	0	1	2	3
14. Acts as a leader among children of his/her age group.	0	1	2	3

15. Relates information gained in the past to new knowledge that the student acquires.	0	1	2	3
16. Shows more interest in creative effort and new activities than in routine and repetitive tasks.	0	1	2	3
17. Tries to excel in almost everything attempted.	0	1	2	3
18. Figures out his/her own solutions to problems and shows common sense.	0	1	2	3
19. Has a sense of humor.	0	1	2	3
20. Shows an intense interest in some artistic activity such as drawing, singing, dancing, writing, playing a musical instrument.	0	1	2	3
21. Makes up stories that are vivid and dramatic or relate experiences with a great deal of exact detail.	0	1	2	3
22. Likes puzzles and various kinds of "problem" games.	0	1	2	3
23. Has exceptional ability in mathematics.	0	1	2	3
24. Shows and unusual interest in science or mechanics.	0	1	2	3
25. Shows an awareness of things that are new or novel.	0	1	2	3

ADDITIONAL COMMENTS

SCALE FOR NON-CONFORMING STUDENTS

	Does not apply / not sure	Never	Some-times	Fre-quent-ly
1. Quiet, serious, may be withdrawn.	0	1	2	3
2. Disinterested in schools.	0	1	2	3
3. Subtle sense of humor/zany ideas.	0	1	2	3
4. Has an expressive vocabulary.	0	1	2	3
5. Likes independent projects.	0	1	2	3
6. Stubborn or resistant to conforming.	0	1	2	3
7. Achieves highly in areas of interest.	0	1	2	3
8. Doesn't do assignments but sometimes does well on tests.	0	1	2	3
9. Idealistic, sometimes skeptical or cynical.	0	1	2	3

10. Rebellious attitude.	0	1	2	3
11. Reads a wide variety of material.	0	1	2	3
12. Clever in making or repairing things.	0	1	2	3
13. Concerned with social issues.	0	1	2	3
14. Likes to follow maps or read charts.	0	1	2	3
15. Original in approach, may reject traditional.	0	1	2	3
16. Responds to "far out" ideas.	0	1	2	3
17. Has many ideas.	0	1	2	3
18. Alienated from teachers and peers (except for one or two).	0	1	2	3
19. Resistant to drill repetition or "busywork."	0	1	2	3
20. Dislikes regimentation.	0	1	2	3
21. Bored by simplistic explanations.	0	1	2	3
22. Receptive to unusual ideas.	0	1	2	3
23. Persistent or stubborn.	0	1	2	3
24. Generally low self-concept, but may act "cocky."	0	1	2	3
25. Asks "hardnosed" questions.	0	1	2	3
26. Low achiever but could do better	0	1	2	3
27. Probes to heart or core of a problem.	0	1	2	3
28. Likes new ways of doing things.	0	1	2	3
29. Resists interruptions.	0	1	2	3
30. Interested in brainstorming.	0	1	2	3
31. Invests own systems/methods of improving old ways of doing things.	0	1	2	3
32. Invents schemes or ways of skirting rules or regulations.	0	1	2	3

ADDITIONAL COMMENTS

Performance data consists largely of ratings of students products and anecdotal records kept by the teachers. Locally developed instruments adapted from published instruments are made available to teachers to facilitate the evaluation of this data.

Criteria

Students must meet minimum standards in two of the three categories (i.e., testing, nominations, performance data) in order to qualify for the most demanding program options. For testing the standard is the 95%ile. For nominations and performance data, the standard is a 90% average. However, as will be described later, a number of services are available to students who do not meet these criteria if evidence shows they can benefit from the experiences.

Programming

As mentioned earlier the particular promising practice being featured from Menasha Joint School District is the effort to match programming to the strengths identified for a child in the identification process. Differentiated programming is provided based on the degree of giftedness assessed in relation to the areas of giftedness. The programming model is based on the Pyramid Project developed in Texas (Cox, Daniel, & Boston, 1985).

Degree of Giftedness

Based on the pyramid model, opportunities are given that provide for the strengths and interests of all learners through a core program in the regular classroom and that involves curriculum modification, special instructional strategies, team teaching, and learning centers. A second level of services, called special programs, is provided to about 30% of the students. This includes pull-out programs, accelerated groups, special ability groups, and resource services. Finally, about 10% of the students qualify (by meeting the program criteria) for individual provisions, including mentoring, independent research, advanced placement, and out-of-school activities. The given percentages of students to be served at each level are seen as general guidelines. What is more important to educators in Menasha is that students receive the opportunity for services at the appropriate level.

Generally students respond positively to the opportunities presented to them. However, there are those who, when opportunities would result in extending beyond the school day, decline participation.

Generally educators strive to provide curricula meeting certain criteria regardless of level of service. These include providing for multiple levels of response with activities that require interactive learning and personalized experiences, and lessons that encourage exploration and community involvement.

As with the Pyramid Project (Cox et al., 1985) provisions for the gifted are coordinated with the regular program in order to provide appropriate instruction to students on a daily basis. It is the goal of the district to involve students in continuous progress so that students may move from one level of programming to another as they show readiness for specific types of activities and experiences.

Areas of Giftedness

Specific gifted program services are provided to students in the particular areas in which they show the greatest strengths. As shown in Figure 3, the services are categorized into four types: (a) curriculum, (b) guidance, (c) community, and (d) co-curricular. From this figure, it is apparent that gifted program personnel do not view activities funded only under their budget as the sole source of differentiation available to their gifted students. The program is clearly imbedded in and collaborates with the wider school and community program.

The overall goals of the program for the elementary level students are fairly traditional for gifted education, including the development of divergent and convergent thinking skills, creative problem solving, independent study, and interpersonal and intrapersonal skills. For the secondary schools the goals shift to the development of a healthy self-concept, independent and self-directed learning, being a producer of information rather than a consumer, and converting all these skills into a career that is personally satisfying and fulfilling.

Figure 3
Specific Gifted Program Services

SAMPLE PROGRAM OPTIONS				
AREA	CURRICULUM	GUIDANCE	COMMUNITY	CO-CURRICULAR
INTELLECTUAL/ ACADEMIC	Ability grouping Accelerated classes Learning Centers Peer tutors Interdisciplinary study	Developmental guidance Mentorships Career education Peer counseling Individual counseling	Career Expo G.O.A.L. (UW-Oshkosh) Academic camps Contests Science Camp (UW-Eau Claire)	Saturday Morning Specials Odyssey of the Mind Art Fair Forensics/debate Special interest clubs
ARTISTIC/ CREATIVE	Learning Centers Artist-in-residence Music theory class Accelerated fine arts classes Fine arts showcase Field trips Band program	Shadowing Individual counseling Career education Clowning group	Fox Valley Youth Symphony Recreation Department courses Art camps Community theater Appleton Boys Choir Bell choirs	Saturday Morning Specials Art fair Solo/ensemble competition Night of Celebrities Kids on the Block Swing Choir
LEADERSHIP	Cooperative learning Patriotism program Thanksgiving service project Who's who in BDM Lab leaders Matriculation Day	School service aids Student tutors Concerned Persons Group Developmental guidance Individual counseling Career education	Choices Conference (FVTC) WASC Conference (Green Lake) Summer Leadership Workshop Scouting programs Optimist Oration Contest Career Night	Night of Celebrities Odyssey of the Mind Saturday Morning Specials Student awards Safety Patrol Forensics/debate Student Council Mini-days

CONTEXTS

There are a number of contextual issues that are relevant to the development of the practice of matching identification and programming. These include the policy perspectives, school organization and personnel, and community values.

Policy Perspectives

State Policy

Gifted education is mandated in the state of Wisconsin under Standard T of the 20 standards passed by the state legislature in 1985. This mandate also lists the areas of giftedness to be served, which are reflected in Menasha's official definition. All districts in the state were to be in compliance with the mandate by 1990. Every five years an audit is conducted by the state to determine compliance with the mandate. Menasha will experience their first state audit in February, 1993.

Local Policy

However, Menasha schools advocated for gifted students and funded formal programs for gifted education for almost a decade before the mandate. The program initially began at the elementary school level in 1978. Because students matriculated up the grade levels, the program also moved up the grade levels until, in 1982, it covered grades kindergarten through twelve. The Menasha program is considered exemplary in the state of Wisconsin, and with the recent legislative mandate, a number of school districts from around the state are now contacting the Menasha schools for assistance in developing programs that meet the requirements of the law.

The state mandate has also been useful in providing an impetus for the improvement of programs in Menasha. Prior to the mandate, there was an assumption that students gifted in the arts were receiving appropriate services because they were placed in band, orchestra, choir, or fine arts. That assumption has now been challenged, and district personnel are looking at what can be done to support children with exceptional talent in these areas.

SCHOOL ORGANIZATION AND PERSONNEL

School Board

One of the stated goals of the Menasha Gifted Program is the maintenance of "commitment from the Board of Education that will place the gifted/talented program at a high priority" (MJSD, 1989, p. 4). The school board has seven members, of whom four have had children in the gifted program; the president, the vice-president, the treasurer, and one other standing member. This has occurred without any special effort on the part of advocacy groups to find and support candidates favorable to gifted education.

While school personnel have worked with board members to convince them of the importance of gifted education, board members--on their own--have recognized the need for the program and have provided the necessary resources for the program to be effectively managed. In this relatively small school district, three full-time-equivalents have been committed to the program. Currently an additional half-time person is being considered for next school year.

Superintendent

The superintendent (who has been with the district since 1984) is an advocate of the effective schools movement. All school programs, including the gifted program, must always be asking themselves where they are now, where they should be going, and how they are going to get there. The focus is on identifying weaknesses and turning them into strengths. District personnel are asked to keep in mind the constant need for challenging themselves to do a better job.

Gifted Program Coordinator

Two program goals of the Menasha Gifted Program deal with the importance of administrators and teachers in the development of the program (MJSD, 1989). To facilitate this, specific job descriptions are given in the program document for the Coordinator of Gifted/Talented, principals, and classroom teachers. Accountability for the program is through the coordinator to the Director of Curriculum and Instruction.

The coordinator is specifically charged with cooperatively facilitating the interactions of administrators, counselors, and teachers in providing for the needs of gifted students. In addition, the coordinator develops and presents special pull-out activities for gifted students and takes advantage of team-teaching opportunities in order to be closely involved instructionally with teachers and students.

The current coordinator has been in the position since 1984. The ability to bring groups together in order to build a consensus has, in fact, been a particular strength of the current coordinator. He has also made a worthwhile effort to bring in people to provide information and training on gifted education to the various school audiences. While the resources used have been fairly conventional (e.g., national experts, local university personnel, conferences, workshops), the consciousness raising that has occurred in the district has been gratifying.

Program Evaluation

Menasha Joint School District is a member of the School Evaluation Consortium (SEC) that is an organ of the North Central Evaluation Organization. Unlike the North Central Audit in which professionals come in and evaluate the entire school program every five to seven years, the SEC places specific components of the school program on a five year cycle so that some aspect is evaluated every year. Therefore, the gifted program will be subjected to an evaluation at least every five years. Much like an accreditation study, program personnel will first look at the program internally, that study will then be audited by outside experts in gifted education from the Midwest who will spend time in the district, identifying strengths and weaknesses in the program and making recommendations for converting weaknesses into strengths. For the Menasha schools, the first look at gifted education in this process will occur in 1994.

Community Values

The gifted program goals in Menasha mention the importance of community and parental involvement. Indeed, the Menasha gifted program was established as a direct result of parental involvement when, in the early 70s, parents formed a committee and began to pressure the district to better address their children's needs. In 1975, teachers, parents, and administrators laid the groundwork for the present program. Most important in this was a parent who later became a board member and who served as a teacher's aide for one of Menasha's teachers. That teacher later became the first gifted program coordinator and now teaches gifted education in the University of Wisconsin system. The formal school program was established in 1978.

Currently the district's Gifted/Talented Core Committee is comprised of parents, school board members, and teachers. This committee's function is to evaluate existing practices and to generate new ideas. However, parent involvement in advocacy has not always been maintained at high levels. Recent meetings deteriorated in terms of attendance and interest.

To ameliorate the situation, advocacy meetings were moved from the afternoon to the evening, invitations were expanded, and an information-seeking attitude was adopted. This year the process resulted in greater attention being paid to deficiencies in the acceleration aspects of the program. In response to parent concerns, a committee of school personnel was formed that has now reorganized the acceleration program to be more responsive to the children's needs and to eliminate barriers to acceleration.

District personnel are realistic in their appraisal of the current advocacy situation. As stated by the coordinator, "We are at a zenith in terms of advocacy at the moment, but I'm sure it's going to flow over the years, because in some years the issues aren't as great as other years."

Nonetheless, Menasha has a portion of its citizenry (particularly seniors and more conservative young people) who are more concerned about property tax levels than they are about programs serving the special needs of a portion of the student body. There are those who believe that gifted students can "make it on their own." This belief is also held by some of the teachers in the schools. Gifted program personnel recognize these individuals, not as villains or opponents, but as individuals who may need more information--particularly in light of the national goals for world superiority in math and science.

TWO OVER-RIDING ATTITUDES

In reviewing the materials provided by Menasha Joint School District and discussions with school personnel, there are two important attitudes that have provided the basis for an environment supportive of the promising practice on which we have focused here. One is the pre-eminence of the individual student as the focus of the gifted program; the other is the evaluative mindset that pervades the way school personnel view themselves and the gifted program.

The Individual Student

While the Menasha Gifted Program document contains the same references to maximizing student potential that can be found in the documents of most gifted programs in the country, there are a number of evidences that this is more than just public relations copy. First of all, the concerted effort to identify both the area and degree of giftedness for each child is laudatory. Further, the district uses resources beyond those financed for their program if it will do the child good. Thus, community education, co-curricular activities, and community resources are drawn upon to provide appropriate programming for the child. This lack of territoriality illustrates how it is the child and not the program that is important.

In addition, the focus on the manner in which giftedness is expressed--be it in a conforming or a non-conforming way--shows that the district expects variability from child to child. In addition to beginning the nomination process with an eye on variability among gifted children, Menasha schools also permits students to make choices among the options that are provided for them. Though children are strongly encouraged to take advantage of opportunities in the school and community, they are not forced to accept the programming offered. Thus, the autonomy and personal responsibility of the children is respected.

Finally, the program goals specifically state that skills learned in the gifted program are to be translated into a career that is personally satisfying. While the program's philosophy mentions responsibility to oneself, to the school, to the community, and to a changing society (again fairly typical of many gifted program philosophies), it clearly states that "the ultimate goal is to assist students to achieve personal fulfillment" (MJSD, 1989, p. 2). Responsibility to community and society are seen as vehicles to the personal fulfillment, not as outcomes. The district coordinator stated, "We will be advocates for challenging gifted young minds ... We will do whatever is reasonably possible to meet that challenge, ... not only in terms of acquiring more academia, but also in terms of their self-image--understanding the fact that they are different, but that difference should not be a detrimental difference to them."

The Evaluative Mindset

Formal and informal evaluation pervades the conduct of the gifted program. The district not only participates in program reviews by state department personnel, but is highly involved in local evaluation consortia. Program personnel did not take the state mandate as an opportunity to pat themselves on the back for already being in compliance with many aspects of the regulations, but saw it as a chance to review the program and determine new areas for improvement.

Perhaps most telling is the attention paid to the various groups that have an interest in the gifted program. The importance of evaluation to the superintendent has kept program personnel "up on the balls of our feet and not getting complacent and getting back on the heels of our feet and saying, 'Well, we're perfect. We don't have to change.'"

Teachers give input through the Core Committee that is responsible for annual review of the program. This committee has contributed to significant changes in procedures, and programming over the years. When other groups provide input as to needed improvements in the program, it is this Core Committee that responds with detailed work to implement recommendations.

Finally the responsiveness to parents' input is impressive. While many programs would sit back lackadaisically and interpret lack of parent advocacy as an indication that parents are satisfied, Menasha's gifted personnel reorganized in order to activate parents. This activation resulted in important insights from parents that have been acted upon by school personnel to improve the program.

The district coordinator stated, "I don't think this [program] is ever going to be a program that's going to be etched in granite. I think it's just going to be evolving over the decades, and I think that's the way it should be." This evaluative attitude is an important component of a program that permits educators to keep it growing and responding at a personal level to the needs of those it is intended to serve.

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Coordinating Instruments with Identification in Bayonne, New Jersey

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Abstract

A set of instruments designed to locate strengths across several facets of giftedness has been developed for a magnet school program in the public schools of Bayonne, New Jersey. These instruments are a part of a process designed to identify students' content knowledge, performance abilities and attitudes. The ultimate purpose of the identification process has been to match the goals of the programs at the magnet school to the specific identification components. A second model described in this chapter offers guidelines and resources for teachers to identify high ability learners in the regular classroom.

The pervasive philosophy in the Bayonne, New Jersey schools is one that recognizes its obligation to identify, teach and evaluate the unique abilities of all gifted students. The philosophical basis for Bayonne's gifted and talented programming is founded upon the premise that every child has gifts or talents. Children who demonstrate an "uncommon aptitude for some special work" or show evidence of "a potential for consistently excelling in one or more areas" are eligible for one of two educational options. The goals of the program are to provide the opportunities, the resources and the encouragement for all students to reach their potential.

Two distinctive programs are offered to elementary age students in Bayonne, each with its own gifted identification process. The first, a magnet school known as the Vroom Learning Center, serves gifted students, grades 4-8, from around the city. Enrollment in the magnet school is a voluntary procedure, so not all of Bayonne's gifted and talented population attends this special program. The second option offers a within class differentiated curriculum to elementary aged gifted youngsters in which students are identified, taught and evaluated by regular classroom teachers.

PART I THE Vroom LEARNING CENTER: A Magnet School

As a result of desegregation changes in 1977, the Vroom Learning Center's Gifted and Talented Program was initiated to fulfill the district's obligation to serve all high ability students. Since 1987 the school has adopted more effective identification procedures created to identify strengths across several facets of giftedness as well as potential gifted behaviors in minority students. Methods of matching identification instruments with five areas of talent have been developed as part of the criteria for admission to the Vroom Learning Center.

Applications are accepted for students to participate in one of the five magnet school programs; art, music, psychomotor (gym), vocational (shop), and intellectually gifted.

Youngsters in grades 4-8 are required to submit an application, a parent-nomination form, and a teacher nomination form. Prospective students are selected and invited to attend the Vroom Learning Center for a one-half day visit. During that time children meet informally with the principal and the G/T Director to become acquainted. The Student Nomination Form is used as an interest inventory to facilitate the dialogue among the student, staff and teachers. Youngsters are encouraged to bring portfolios representative of their talents, or finished products that indicate suitability for admission to one of the five program offerings. As part of the interview process, students complete an identification component designed to determine potential gifted behaviors in art or music, psychomotor or vocational areas.

Each of the gifted identification components was developed in 1987 by Catherine Quinn, the current Director of Gifted and Talented Studies for the Bayonne School District. The instruments were designed to identify the students' content knowledge, performance abilities and attitudes. The author consulted several sources to compile instruments that matched the goals of the program and could be adapted to Bayonne's particular situation. The resources used to develop the various components of the Vroom program included: the National Leadership Training Institute's elements for differentiating curriculum; Nebraska State Department of Education publication called Identification Supplement to RULE 3; and Guides in Gifted Education by the New Jersey State Department of Education. The Renzulli-Smith Early Childhood Checklist and Renzulli's Schoolwide Enrichment Model were consulted as well.

Data from the instruments formulated from these sources yield a review of students' written knowledge and performance on a particular activity and are presented with each program component.

ART PROGRAM IDENTIFICATION

First, in the visual arts, the emphasis is on the child's development of talent over a period of time. Therefore, a representative sample of the student's work is selected by the students and the parents to comprise a portfolio which is given to the panel of teachers at the magnet school. The art department teachers, classroom teachers, principal and director of the Vroom Learning Center discuss the child's present level of artistic ability and the richness of detail evidenced in the sample selection. The identification procedure involves a portfolio presentation and evaluation, and an assessment of a product resulting from an on-site assignment (see Figure 1).

The student's art portfolio is examined for: originality, sequential improvement, two-dimensional drawing or painting skills, three-dimensional manipulative/craft skills, variety of media and techniques, and knowledge of color, line, shape, composition, and form. The student is expected to complete an on-site assignment (depict a bird) from one of three sets of materials: 1) paper, pencil, scissors, glue; 2) clay and tools; or 3) paper, watercolors, brushes, markers, and drawing pencil. This product is inspected by the art teacher for completion in time allotted, serious effort, grasp of process during instruction, aesthetic qualities, knowledge of color, line, shape, composition, and form.

Based on all the information gathered, the panel of teachers determines if the student demonstrates ability and interest in art and would benefit from additional art experiences. The flexibility of this process allows for a commentary or narrative report prepared by art educators and other committee members.

Figure 1

Bayonne School District Gifted and Talented Program Art Component

Student's Name______________________________ Grade as of the following September _______________

Teacher/Evaluator______________________________ Date_______________

DIRECTIONS: In reviewing the student's portfolio, check the column YES or NO as it applies:

YES NO

1. Portfolio was presented.
2. Shows sequential improvement.
3. Work is original (ask student).
4. Work is two-dimensional (drawing/painting skills).
5. Work is three-dimensional (craft/manipulative skills).
6. Work shows a feel for or a knowledge of the concepts of design (color, line, shape, composition, form).
7. Work displays a variety of media/techniques.

Comments:______________________________

DIRECTIONS: Please check the column YES or NO as it applies to the student's on-site assignment.

YES NO

1. Project completed in time allotted.
2. Student takes art work seriously.
3. Quickly grasps and uses steps in process when instructed.
4. Student's work displays aesthetic qualities.
5. Student's work shows a feel for a knowledge of the concepts of design (color, line, shape, composition, form).

DIRECTIONS: Based on all the information you have gathered, please answer the following questions by checking the appropriate column.

YES NO

1. Does the student display an interest for/ability in art?
2. Would the student benefit from additional are experiences?

Comments: (optional)______________________________

____

MUSIC PROGRAM IDENTIFICATION

A locally developed instrument for identifying musical talent is administered by two state certified music teachers who are present during the student's interview and the audition. Discussion among these experts, the principal and the director of the magnet school provides the forum at which the child's music potential is assessed.

Figure 2

Bayonne School District Gifted and Talented Program Music Component

Student's Name________________________ Grade as of the following September

____

Teacher/Evaluator________________________Date

DIRECTIONS: In reviewing the student's written work, check the column YES or NO.

YES NO

The student has a comfortable knowledge or understanding of (1-9):

1. Rhythm
2. Meter
3. Note Value
4. Measure
5. Scale
6. Clef
7. Sharps/Flats
8. Notation Levels
9. Music Vocabulary
10. The student's interpretation exhibits aesthetic qualities

DIRECTIONS: While students are doing the written form, call them up one at a time for the performance part. Check the appropriate column.

EXERCISES YES NO

1. Clap out rhythm pattern (alone, with teacher)
2. Recognize and reproduce pitch (high, low, same)
3. Exhibit tonal memory
4. Display a feeling for harmony
(through round, 2-part harmony with teacher)

PREPARED PIECE VOCAL INSTRUMENTAL

Name of piece________________________

Quality Excellent Good Poor
(Circle one)

ASSIGNED PIECE VOCAL INSTRUMENTAL

Name of piece________________________

Quality Excellent Good Poor
(Circle one)

DIRECTIONS: Based on all the information you have gathered, please answer the following questions by checking the appropriate column.

YES NO

1. Student takes music seriously
2. Student exhibits good time-on-task skills
3. Student's work displays aesthetic qualities
4. Student's work exhibits a feel for of knowledge of the elements of music.
5. Student's body language displays musical expression
6. Does the student display an interest for/ability in music?
7. Would the student benefit from additional musical experiences?
Comments: (optional)________________________

____

The student's knowledge is determined by performance as well as a written assessment of basic music. Knowledge of notation, music vocabulary, sharps, flats, clef, scale, measures, note values, meters, and rhythm are measured. Tasks of recognizing and reproducing pitch; clapping rhythm patterns; singing 2-part harmony; and exhibiting tonal memory indicate performance abilities in music. The identification process also requires applicants to bring a musical instrument and a selection to play or sing at an audition. The music teacher as the evaluator rates the quality of the performance as excellent, good or poor. In addition, the youngster is assigned a particular piece to play or sing according to ability level. The performance is rated in a manner similar to the prepared selection.

Based on the child's demonstration of musical knowledge and performance of vocal and/or instrumental talent, an assessment regarding the student's ability to take music seriously; exhibit good time-on-task skills; display aesthetic qualities and a knowledge of musical elements is formulated. Use of the locally developed instrument (see Figure 2) identifies musical talent and helps educators determine whether the child would benefit from additional music experiences.

PSYCHOMOTOR PROGRAM IDENTIFICATION

Initially, the student is expected to complete a fifteen item, written component for admission to the psychomotor program at the Vroom Learning Center. This self-assessment of skills chart requires that the child answer with an X indicating "I can do this best," "I can do this," "I think I can do this," or "I can't do this." Categories of physical activity involve endurance in running and bike riding; hand-eye coordination and manipulative ball skills; balancing and calisthenics; upper body strength; and coordination in jumping and running. Secondly, on-site tasks are designed to the student's present level of fine and gross motor ability. The child's psychomotor skills are rated by the physical education teacher according to the student's age-appropriate ability. The categories of movement activities include a range of thirteen specific skills rated 1-Excellent, 2-Average, 3-Poor, and 4) Not able to perform. Examples of the psychomotor skills are outlined in the instrument which follows.

Figure 3

Bayonne School District Gifted and Talented Program Psychomotor Component

TASKS FOR ON-SITE ASSIGNMENT

1. Jumps rope - single foot, double foot
2. Throws - underhand, overhand
3. Catches - high, low
4. Dribbles - basketball, soccer (right hand, left hand)
5. Jumps - broad
6. Bats a ball - tennis racquet, or bat
7. Shuttle running - form, breath control, speed
8. Gymnastics - forward, backward rolls, headstand, cartwheel)
9. Balance beam - forward, backward, turn, balance (use high or low beam)
10. Scooter use - crawl stroke, breast stroke, maneuverability
11. Obstacle course maneuverability
12. Ability to follow directions
13. Creative performance - optional

RATING SYSTEM

1 - Excellent
2 - Average
3 - Poor
4 - Not able to perform task

TEACHER COMMENTS

OCCUPATIONAL PROGRAM IDENTIFICATION

Using a scale developed specifically for the Vroom Learning Center, the industrial arts personnel judge the craftsmanship of applicant projects completed at home. A project is examined for: originality, sound design, foundational support, use of proportions, security, placement of materials, accuracy, aesthetics, and attention to detail. The industrial arts teacher uses the rating scale to note the child's demonstration of ten specific skills evident in the industrial arts project. This independent project must reflect the child's present level of ability in constructing hand-made objects (see Figure 4).

Figure 4

Bayonne School District Gifted and Talented Program Vocational Component

Student's Name____________________Applying to Grade________

Teacher/Evaluator____________________Date__________

Project Presented______________________________

DIRECTIONS: In reviewing the student's project, check the appropriate column or item as it applies:

	YES	NO	N.A.
1. Project was presented			
2. Project was complete			
3. Project was student's work (Ask student)			
4. Project shows evidence of sound design:			
A. Good foundation support			
B. Good use of materials			
C. Correct use of proportions			
D. Joints are secure (Not falling apart)			
E. Accurate placement of inherent items			
5. Project was neatly done			
6. Project was accurately done			
7. Project is aesthetically pleasing			
8. Project shows a caring for details			
9. Project displays use of a variety of skills as checked below:			

___cutting ___nailing ___framing ___sanding
___screwing ___hammering ___shaping ___varnishing
___painting ___gluing

DIRECTIONS: Please check the appropriate column as it applies to the student's on-site assignment:

The student was able to successfully:	YES	NO	N.A.
1. Hammer two pieces of wood together			
2. Screw a screw in a pre-drilled hole			
3. Saw a piece of wood in half			

DIRECTIONS: Based on all the information you have gathered, please answer the following questions by circling the appropriate response.

1. Does the student display an interest for/ability in shop?	YES	NO
2. Would the student benefit from additional experience in shop?	YES	NO

Comments: (optional)______________________________

The on-site assignment determines the student's ability to use tools accurately and appropriately. Work areas are supplied with materials set up for the task completion portion of the procedure. In a ten minute time period, using nails, scraps of wood and a hammer, the student must join two pieces of wood together. Written directions which instruct the child to saw a piece of wood in half and use a screwdriver to place screws into a pre-drilled block of wood are other steps in the process. The industrial arts teacher as an evaluator assesses the student's knowledge of safety rules, purposes of the items in a wood or machine shop, and interest and ability in the vocational arts.

INTELLECTUAL PROGRAM IDENTIFICATION

All students (K-8) in Bayonne are given the California Achievement Test and the Test of Cognitive Skills (grades 2-6). In addition, a writing sample is required of all students applying to the Vroom Learning Center. Results of these measures and the students' prior school records are reviewed as part of the consideration for admission into the magnet school gifted and talented program. The Director and the principal work with teachers to review the multiple sources of data as the basis for inclusion in this component of the magnet school.

INDIVIDUALIZED IDENTIFICATION

These identification practices are designed to match the gifted education programs in Bayonne. The philosophy that drives educators to seek inclusion of students with gifted potential and to search for how best to serve every child is integral to the practices implemented in Bayonne. The commitment to individual needs, talents and learning styles is voiced in the comment by Catherine Quinn, the Director of the magnet school, "One of the things we do is try to work our philosophy around the whole child, and not just one aspect. We feel responsible for educating the whole child and therefore we get a more complete picture when the child comes in for an interview and all records are reviewed."

The objective of the identification procedure is to obtain information from the student interview, prior school records, and on-site performances in order to provide a comprehensive picture for placement. Because each screening and identification procedure is tailored to the particular enrichment program offered at the Vroom Learning Center, the aim is to gather data from individual children and then, by consensus, to determine how best to serve every student.

PART II: BAYONNE MODEL OF ENRICHMENT WITHIN CLASSES

TEACHERS IDENTIFY THE GIFTED

An analysis of the testing results in the Bayonne School District has shown consistently that students with high IQ scores attend elementary schools other than the Vroom Learning Center. Therefore, a model designed for gifted identification and enrichment has been established for use across district elementary schools. These guidelines provide the resources for teachers to identify high ability learners in the regular classroom. The procedures are in agreement with Bayonne's inclusive philosophy of giftedness, allowing teachers the flexibility to maximize the benefits of their observations and knowledge. Determining which children have the potential to excel is a challenge requiring a thorough, flexible identification plan.

Multiple sources of data present teachers with a comprehensive view of a student's ability, potential and talents. The districtwide criteria include the Dallas Pre-School Screening Test for pre-kindergarten, the Search Test for kindergarten, The Test of Cognitive Skills (grades 2-6), the California Achievement Test (grades K-8) and cumulative record averages. However, the unique characteristic of Bayonne's gifted identification procedure is in the teacher's choice of checklist options. The school policy permits teachers to select one or more of the specific checklists for use in identifying students. The checklists are all indicative of observable, characteristic behaviors, only the forms for recording them are different. Students considered for placement demonstrate the majority of behaviors as listed on these particular forms:

1. Early Childhood Checklist by Renzulli-Smith;
2. Early Childhood Pre-Identification Checklist (adapted form, locally developed);
3. Pre-Kindergarten and Kindergarten Checklist by Corabelle Clark and Eleanor Dyer, Compton; Lyman Peterson, Paramount; Marguret Lund, Manhattan Beach; Beatrice Lantz, Division of Research and Guidance, Office of Los Angeles County Superintendent of Schools;
4. Identification Checklist, All elementary Grades (adapted form, locally developed);
5. Teacher Nomination Form, developed by Susanne Richert, Ph.D., EIC South, NJ Department of Education;
6. Parent Nomination Checklist (used only in the magnet school, adapted form, locally developed);
7. Peer Nomination Form - Primary and Middle (adapted forms, locally developed);
8. Student Self-Nomination Survey (adapted form, locally developed).

Teachers are trained by the director to identify gifted students in their classrooms using the various checklists. This flexibility allows for the preferences and styles of individual professionals. To avoid teacher bias in this type of identification process, the input of many teachers is solicited. Data sheets from previous years are examined and commentaries are used as guidelines. Classroom teachers' assessments are on-going throughout the year. They are responsible for locating children who exhibit behaviors and characteristics of the gifted. This variety of data is not tallied for gifted program placement. Instead, consensus among professionals in Bayonne results in decisions to provide enrichment opportunities for high ability students in the regular classroom. The shared responsibility for locating and teaching gifted children increases confidence in the decision-making process.

Identification practices designed to serve potentially gifted youngsters hold promise for other schools in this country. The commitment to locate and develop each child's unique abilities is a challenge to educators in many school settings. By examining specific traits and potential talent within the parameters of the programs described, students are assessed in order to best meet their needs.

Overview of Noteworthy Practices and Innovations in the Identification of Gifted Students

TITLE	GRADE LEVEL	PROGRAM TYPE	IDENTIFICATION
Project STREAM Support, Training, and Resources for Educating Able Minorities	High school and middle school levels (6-12)	Gifted programming options include academic acceleration/enrichment; talent development; campus residency experiences; partnerships with university students; and career exploration	Multiple criteria including o Talent Identification Matrix (TIM); o Drawing tasks from Art Is Elementary; o Contextually relevant problem-solving tasks; o Opportunities for demonstrating and developing improvisational talent in both drama and television production (ORCA)
Early Assessment for Exceptional Potential in Young Minority and/or Students	Primary levels (K-3)	Demonstration teaching in primary social studies and science lessons	o Portfolio assessment process using eighteen primary identifiers; o Observational data collected on videotape (Vi DATA analysis)
A Model Program for Identifying Young Underserved Gifted Students	Primary levels (K-2)	Small and large group instruction in the full time nurturing classes; specialized nurturing; multiple intelligence pull-out programs; nurturing activites in the regular program; enrichment activities for the gifted; and diagnostic teaching sessions	o Multilayered identification process incorporates a standard, multiple criteria g/t selection model; o the Multiple Intelligences Checklist; o the Diagnostic Battery Program of Assessment, Diagnosis and Instruction (PADI); o Identification through teaching

Overview of Noteworthy Practices and Innovations in the Identification of Gifted Students

TITLE	GRADE LEVEL	PROGRAM TYPE	IDENTIFICATION
The Full Potential Program for Underserved African American Students	Elementary levels (1-5)	Special curriculum for Full Potential Schools including both enrichment and specialized academic focus areas required for each pilot class in grades 1-5; infusion of African/American history and culture	o Behavioral rating scales designed to rate culturally appropriate expressions of giftedness in African American students; (the Optimal Performer Locator for Teachers, and the Optimal Performer Locator for Parents)
Urban Scholars: Access to Excellence for Students and Schools	High school and middle school levels (6-12)	Academic after-school and summer core curriculum (high school); math and science problem-solving (middle school)	o Interview protocol including an essay rating scale; o Behavioral checklist used by teachers to assess task commitment, motivation. and creative potential; o Torrance Test of Creative Thinking--Figural
The Search for Talent: New Methods for Assessing Student Strengths	Kindergarten - High School (K-12)	In class instructional programming including optional sample lessons; assessment emphasizes out of class products as well	o Texas Student Portfolio (TSP) focusing on nine behavioral descriptors associated with high performance; o Curricular activities designed for observational data collection (Activity Placemats or the MATS)
Talent Beyond Words: Identifying and Developing Potential Talent Through Music and Dance in Economically Disadvantaged, Bilingual and Handicapped Children	Elementary levels (3-6)	Comprehensive arts program in dance and music including a series of professional performances, workshops, and classes; performance observation of children in a multicultural, arts-oriented curriculum	An observation panel (comprised of the artist/instructors, the classroom teacher, an Arts Connection representative and an outside observer) using the o ArtsConnection behavior-based criteria Checklists for Dance and Music; o Dance and Music Identification tally sheet;

Overview of Noteworthy Practices and Innovations in the Identification of Gifted Students

TITLE	GRADE LEVEL	PROGRAM TYPE	IDENTIFICATION
The Twice-Exceptional Child Project: Identifying and Serving Gifted/ Handicapped Learners	Elementary and middle school levels (K-8)	Classes providing differentiated curricula for educating learners with both gifted potential and problems with learning, behavior and/or communication	Multifaceted identification process conducted by the Identification Planning and Coordinating Team (comprised of project personnel, university educators and researchers, and public school education administrators) includes five steps: 1) Preplanning discussions and activities 2) Awareness training 3) Establishment of the referral-to- placement procedures 4) Creation of a district level screening committee 5) Implementation and refinement of the referral-to placement procedures
Spotting Talent Early in Minority Students: Project STEMS in Howard County Maryland	Primary (K-2)	Teachers trained to observe gifted traits among minorities during specialized curricular activities taught by G\T resource personnel	○ STEMS observational checklist including ten behavioral indicators on which teachers tally behaviors and or combinations of behaviors; ○ STEMS Teacher Questionnaire (Pre and Post) surveys teachers prior to inservice training and following the yearly program
The Menasha Joint School District Gifted Program: Matching Identification and Curriculum	Elementary and secondary levels (K-12)	Programming at various levels offered in the areas of intellect, academics, creativity, leadership, and visual and performing arts based on the student's particular assessment profile; program includes curricular, guidance, community, and co-curricular activities	○ A multiple criteria system using three categories of tools: 1) testing 2) nominations 3) performance data; Two locally developed teacher scales are employed (the Scale for Conforming Students and the Scale for Non-Conforming Students)

Overview of Noteworthy Practices and Innovations in the Identification of Gifted Students

TITLE	GRADE LEVEL	PROGRAM TYPE	IDENTIFICATION
Coordinating Instruments with Identification in Bayonne, New Jersey	Elementary (4-8)	A magnet school program providing enrichment; within class differentiated curriculum in regular classes	Identification instruments designed to determine students' content knowledge, performance abilities, and attitudes and match them to program goals including: o Portfolio assessment o Performance rating scales o Behavioral checklists